



6712-01

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 1 and 54

[GN Docket No. 20-32; FCC 20-52; FRS 16709]

Establishing a 5G Fund for Rural America

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: In this document, the Federal Communications Commission (Commission or FCC) proposes to retarget universal service funding for mobile broadband and voice in the high-cost program to support the deployment of 5G services by establishing the 5G Fund for rural America and seeks comment on the appropriate framework for implementing the 5G Fund.

DATES: Comments are due on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**; reply comments are due on or before **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: Pursuant to §§ 1.415 and 1.419 of the Commission's rules, 47 CFR 1.415, 1.419, interested parties may file comments and reply comments identified by GN Docket No. 20-32 on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's

Electronic Comment Filing System (ECFS). *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- *Electronic Filers:* Comments may be filed electronically using the Internet by accessing the Commission's Electronic Comment Filing System (ECFS) <https://www.fcc.gov/ecfs/>. Except when the filer requests that materials be withheld from public inspection, any document may be submitted electronically through the Commission's ECFS. Persons that need to submit confidential filings to the Commission should follow the instructions provided in the Commission's March 31, 2020 public notice, DA 20-361, regarding the procedures for submission of confidential materials.
- *Paper Filers:* Parties who choose to file by paper must file an original and one copy of each filing. Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Dr., Annapolis Junction, MD 20701.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th St. SW, Washington, DC 20554.
- **Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19. *See FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy*, Public Notice, DA 20-304 (March 19, 2020). <https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy>.**
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FOR FURTHER INFORMATION CONTACT: Kelly A. Quinn, Office of Economics and Analytics, (202) 418-0660.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Notice of Proposed Rulemaking (NPRM) in GN Docket No. 20-32, FCC 20-52, adopted on April 23, 2020 and released on April 24, 2020. The full text of this document is available for public inspection during regular business hours in the FCC Reference Information Center, Room CY-A257, 445 12th Street SW, Washington, DC 20554, except when Commission Headquarters is otherwise closed to visitors. See Public Notice, *Restrictions on Visitors to FCC Facilities*, that appeared on the Commission website March 12, 2020, or by using the search function on the Commission's ECFS webpage at <https://www.fcc.gov/ecfs/>. It is also available on the Commission's website at <https://www.fcc.gov/document/fcc-proposes-5g-fund-rural-america-0>. The Order that was adopted concurrently with this NPRM will be published elsewhere in the **Federal Register**.

Synopsis

I. Introduction

1. 5G mobile wireless networks promise to be the next leap in broadband technology, offering significantly increased speeds, reduced latency, and better security than 4G LTE networks can offer. 5G mobile wireless broadband service is expected to create as many as three million new jobs, generate \$275 billion in private investment, and add \$500 billion in new economic growth. The

Commission anticipates that the progression to 5G service will be swift. Since late 2018, major U.S. mobile wireless carriers have lit up 5G networks covering more than 200 million Americans in aggregate. And, as part of its recently approved transaction, T-Mobile has committed to deploying 5G service to 99 percent of Americans within six years, including covering 90 percent of those living in rural America within that timeframe. The Commission is concerned, however, that even with these significant deployment commitments, some rural areas will remain where there is insufficient financial incentive for mobile wireless carriers to invest in 5G-capable networks, and those communities could be excluded from the technological and economic benefits of 5G for years to come. During this transition to 5G service, the Commission therefore reaffirms its commitment to using Universal Service Fund support to close the digital divide and to make sure that parts of rural America are not left behind.

2. Given the concerns many stakeholders raised about the accuracy of Mobility Fund Phase II 4G LTE coverage data, many of which were validated during Commission staff's investigation into carriers' maps, and in light of the changes taking place in the marketplace, it no longer makes sense to use limited universal service support to deploy 4G LTE networks. Rather, to ensure that all Americans enjoy the benefits of the most modern, advanced communications technologies offered in the marketplace no matter where they live, and to maintain American leadership in 5G, the Commission proposes to establish a 5G Fund for Rural America, which would use multi-round reverse auctions to distribute up to \$9 billion, in two phases, over the next decade and beyond to bring voice and 5G broadband service to rural areas of the country that are unlikely to see unsubsidized deployment of 5G-capable networks. Phase I of the 5G Fund would target at least \$8 billion of support to rural areas of the country that would be unlikely to see timely deployment of voice and 5G broadband service absent high-cost support or as part of T-Mobile's transaction-related commitments. To balance the Commission's policy goal of efficiently redirecting high-cost support to the areas where it is most needed with the Commission's obligation to ensure that it has an accurate understanding of the extent

of nationwide mobile wireless broadband deployment, the Commission seeks comment on two options for identifying areas that would be eligible for 5G Fund support.

3. One approach for Phase I could take immediate action to define eligible areas based on current data sources that identify areas as particularly rural, and thus in the greatest need of universal service support. In recognition of the particular challenges of ensuring that voice and 5G broadband service are deployed to areas that lack any mobile broadband service, the Commission would prioritize areas that have historically lacked 4G LTE, or even 3G, service. This would ensure that the Commission could move quickly to target universal service support to those areas least likely to receive service without support, such as those with sparse populations, rugged terrain, or other factors. Under this approach, the Commission anticipates commencing the 5G Fund Phase I auction in 2021.

4. Alternatively, the Commission could delay the 5G Fund Phase I auction until after it collects and processes improved mobile broadband coverage data through the Commission's Digital Opportunity Data Collection proceeding. Collecting these data would allow the Commission to identify with greater precision those areas of the country that remain unserved by 4G LTE service. While this option would likely result in a less expansive and a more targeted list of eligible areas and help ensure prioritization of areas that currently lack service, it would potentially delay the start of the 5G Fund Phase I auction and deployment of 5G-capable networks in those areas.

5. Phase II of the 5G Fund would follow the completion of Phase I and would target universal service support to bring wireless connectivity to harder to serve and higher cost areas, such as farms and ranches, and make at least \$1 billion available specifically aimed at deployments that would facilitate precision agriculture. By proposing to rely on a two-phased approach, as the Commission did with the Connect America Fund and adopted in the *Rural Digital Opportunity Fund Report and Order*, 85 FR 13773 (Mar. 10, 2020), for the Rural Digital Opportunity Fund, the Commission can commence a 5G Fund Phase I auction while also ensuring that Phase II would cover harder-to-serve areas so that such areas are not left behind. Moreover, the proposal to implement this two-phased approach would allow

the Commission to build upon future recommendations from the its Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States (Precision Agriculture Task Force) to more accurately target Phase II support towards services that will meet the growing needs of America's farms and ranches.

6. Full participation in today's society requires that all American consumers, not just those living in urban areas, have access to the most current and advanced technologies and services available in the marketplace. By supporting the build out of 5G mobile broadband networks in areas that likely would otherwise go unserved, the Commission can help Americans living, working, and travelling in rural communities gain access to communication options on par with those offered in urban areas.

7. The Commission's universal service obligations demand that it keep pace with changes in the communications marketplace. Similarly, the Commission's policy goal must be to use its limited Universal Service Fund dollars in rural America to support the deployment of service using the most current and advanced technology available consistent with what is being offered to urban consumers. The Commission's proposals for the 5G Fund recognize that market realities have changed since the Commission adopted Mobility Fund Phase II, and that supporting the provision of 4G LTE service in unserved and underserved areas will not allow the Commission to accomplish this goal. By proposing to replace the planned Mobility Fund II with the 5G Fund, the Commission seeks to direct universal service funds to support networks that are more responsive, more secure, and up to 100 times faster than today's 4G LTE networks. The Commission reaffirms its commitment to fiscal responsibility and propose concrete performance requirements and public interest obligations to ensure that rural consumers would be adequately served by the mobile wireless carriers receiving universal service support from the 5G Fund. We also propose to amend our generally applicable competitive bidding rules for universal service support and to codify recent guidance regarding letters of credit for universal service competitive bidding mechanisms.

II. Background

8. In 2011, as part of its comprehensive reform of the universal service and intercarrier compensation programs, the Commission froze high-cost support and established the Mobility Fund to ensure that universal service support for mobile services would be targeted in a cost effective manner. The Mobility Fund included two phases. Phase I allocated one-time support for mobile carriers to provide 3G or better service to eligible areas, including on Tribal lands. To minimize shocks to carriers that might result in service disruptions for consumers, the *USF/ICC Transformation Order and Further Notice*, 76 FR 73830, Nov. 29, 2011, 76 FR 78384, Dec. 16, 2011, provided for a five-year transition period during which mobile wireless competitive eligible telecommunications carriers receiving frozen high-cost support would continue to receive support subject to a phase down reduction of 20 percent per year beginning July 1, 2012. The Commission noted that, during the transition period, mobile wireless carriers, including those receiving legacy support, would have the opportunity to seek one-time support under Mobility Fund Phase I to expand 3G or better service to areas where such service was unavailable while also receiving phase-down legacy support.

9. The Commission also provided that if Mobility Fund Phase II were not operational by July 1, 2014, the phase down of frozen high-cost support for legacy support recipients would pause at the 60 percent level in effect on that date. The Commission concluded that the phase-down of legacy support for legacy support recipients serving Tribal lands would also pause at that time. The Commission also indicated that any pause in the support phase-down would be accompanied by additional mobile broadband public interest obligations.

10. For Mobility Fund Phase I, the Commission provided up to \$300 million, along with an additional \$50 million for Tribal Mobility Fund Phase I, in one-time support payments awarded through two reverse auctions. For Mobility Fund Phase II, the Commission proposed to provide ongoing support—including support for Tribal lands—for a period of 10 years and sought comment in the *USF/ICC Transformation Order and Further Notice* on the structure and operation of that fund.

Subsequently, the Wireline Competition Bureau and the Wireless Telecommunications Bureau issued a Public Notice seeking additional public input on certain issues relating to Mobility Fund Phase II. The Wireline Competition Bureau and the Wireless Telecommunications Bureau sought to build upon their experience in implementing reverse auctions to distribute universal service support and the experiences of mobile wireless carriers that participated in Mobility Fund Phase I, and sought comment for Mobility Fund Phase II on issues pertaining to the method for identifying areas eligible for support and establishing the geographic unit for bidding and measuring coverage, performance obligations, and the term of support. Given that mobile wireless carriers had already begun commercial deployment of 4G LTE in many parts of the country, the Commission proposed in April 2014 to refocus Mobility Fund Phase II to target those areas of the country where it was unlikely that 4G LTE service would be made available absent support, and those areas where existing mobile voice and broadband service would not be preserved without support.

11. In September 2016, the Wireless Telecommunications Bureau released its analysis of mobile wireless carriers' December 2015 FCC Form 477 submissions to identify the areas in the country that might require support on an ongoing basis in order to ensure adequate 4G LTE coverage. In addition to identifying the specific areas of the country that were lacking 4G LTE coverage, staff examined the distribution of high-cost support to assess the efficacy of that support to determine where existing mobile voice and broadband service would require continued support. That analysis revealed that as much as 75 percent of legacy high-cost support was being distributed to carriers in areas where it may not be needed because 4G LTE service was already being provided by an unsubsidized carrier. Furthermore, according to the data staff reviewed, only approximately 20 percent of the area of the United States (excluding Alaska) either lacked 4G LTE service entirely or had 4G LTE service provided only by a subsidized carrier. In other words, mobile wireless carriers were receiving approximately \$300 million or more each year in subsidies to provide service even though those subsidies were unnecessary to ensure the availability of 4G LTE service in those areas.

12. In its 2017 *Mobility Fund Phase II Report and Order*, 82 FR 15422, Mar. 28, 2017, the Commission adopted rules to move forward with the Mobility Fund Phase II auction to allocate up to \$4.53 billion over 10 years to support the deployment of 4G LTE service to areas that were too costly for the private sector to serve without support and to preserve such service where it might not otherwise exist absent subsidies. In the subsequent *Mobility Fund Phase II Challenge Process Order*, 82 FR 42473, Sept. 8, 2017, the Commission established the framework for a challenge process aimed at resolving disputes about areas found to be presumptively ineligible for Mobility Fund Phase II support. Mobile wireless carriers were required to submit 4G LTE coverage maps by January 4, 2018, to be followed by a process in which parties could challenge the submitted coverage maps.

13. Based on evidence submitted into the record that called into question the accuracy of the submitted coverage map of at least one nationwide provider, shortly after the close of the Mobility Fund Phase II challenge process submission window, Commission staff conducted a preliminary review of the speed test data that had been submitted to the Commission. The staff review of challenger data, in combination with the record evidence focusing on specific areas in which coverage appeared to be overstated, suggested among other things that some carriers' coverage data reported to the Commission did not accurately reflect consumer experience in those areas. Based upon this review and the carriers' responses to staff inquiries, in December of 2018 the Commission launched a formal investigation of the Mobility Fund Phase II 4G LTE coverage data submitted by certain carriers. In announcing the start of the investigation into potential violations of the data collection rules, the Commission suspended the response phase of the Mobility Fund Phase II challenge process pending conclusion of the investigation. The staff investigation involved collecting additional information from certain carriers regarding their generation of coverage data, conducting independent drive test data to verify the challenger data, and analyzing specific allegations made in the record to evaluate the accuracy of the submitted coverage maps.

14. On December 4, 2019, the Rural Broadband Auctions Task Force released a report on the results of that investigation. Over the course of the investigation, Commission field agents drove nearly 10,000 miles and conducted more than 24,000 speed tests on the mobile networks of Verizon, U.S. Cellular, and T-Mobile across six test routes in 12 states where evidence in the record indicated coverage maps were overstated. Staff discovered that the Mobility Fund Phase II coverage maps submitted by these carriers likely overstated actual coverage and did not reflect on-the-ground performance in many instances, with only 62 percent of the field agent drive tests achieving the 5 Mbps minimum download speed predicted by the maps. In addition to making specific recommendations to improve the accuracy of coverage maps in the future, the staff report recommended that the Commission terminate the challenge process, concluding that the coverage maps were not a sufficiently reliable or accurate basis upon which to complete the challenge process as designed.

15. On October 16, 2019, the Commission approved a transaction between T-Mobile and Sprint, wherein the parties made certain binding commitments as a condition of approval, including substantial nationwide and rural deployment of 5G service within six years of the merger closing date. Specifically, T-Mobile committed to deploying 5G service covering 85 percent of the population in rural areas and 97 percent of all Americans within three years after closing, with coverage rising to 90 percent of the population in rural areas and 99 percent nationwide within six years. Moreover, the parties committed that their deployed 5G service will meet minimum download speed performance benchmarks of at least 50 Mbps available to 90 percent of the rural population, with two-thirds of rural Americans able to receive download speeds of at least 100 Mbps. T-Mobile announced in December 2019 that it had switched on its 5G network across the nation using low-band spectrum. The other nationwide carriers similarly have begun to deploy 5G service in select cities, with widely-available 5G service expected in the near future.

III. Discussion

16. The Commission proposes to retarget universal service funding for mobile broadband and voice in the high-cost program to support the deployment of 5G services by establishing the 5G Fund for Rural America. The Commission believes that supporting the deployment of 5G networks is necessary to ensure that rural America can secure the economic and technological benefits that come from wireless innovation. That is, the Commission's commitment to closing the digital divide compels it to ensure that the same services are available in rural America as in urban areas. The rapid pace of deployment of 5G networks in many parts of the country, combined with T-Mobile's commitment to cover 90 percent of rural Americans with its 5G network, suggests that it is no longer the time to begin a 10-year support program to deploy 4G LTE networks. Consequently, the 5G Fund would replace Mobility Fund Phase II, which would have provided federal support for 4G LTE service in unserved areas, as the means by which the Commission completes the reform of mobile legacy high-cost support. The Commission seeks comment on this proposal.

17. 5G networks are expected to greatly enhance mobile broadband performance by increasing wireless speeds and reducing latency, as well as enabling transformative new services such as smart grids, Internet of Things, Virtual/Augmented Reality, and a host of other applications with the potential to reshape many facets of American life, that will all need robust wireless connectivity. Specifically, through 5G deployment, applications that are particularly useful in rural areas, such as connectivity for remote education and telemedicine, will help the Commission to close the digital divide. Rural farmland in particular has unique connectivity needs, including the proliferation of devices with high data needs, and 5G networks are crucial to unlocking the potential of precision agriculture for the American farmers and ranchers that feed the world by improving productivity and reducing costs. Thus far, the deployment of 5G service has been primarily concentrated in more urban areas with larger population bases.

18. Nor does the Commission believe that supporting the deployment of 4G LTE service would be adequate for rural communities to fully participate in the modern connected economy, given the increased data speeds, security, and responsiveness of 5G services. While there remain areas of the country that lack even 4G LTE service, the need for 5G networks will only increase in the future: By one estimate, 5G connections in North America will exceed 4G LTE connections by 2025. Further, consumers are using more and more data, on average, and this is expected to continue to grow significantly. Targeting support to those areas that would otherwise be unlikely to see deployment of 5G service would therefore help ensure that the Commission is using its limited universal service funds to narrow the digital divide.

19. More specifically, the Commission proposes that the universal service support offered through the 5G Fund should be used to support rural-area mobile high-speed 5G networks that meet at least the 5G-NR (New Radio) technology standards developed by the 3rd Generation Partnership Project (3GPP) with Release 15 (or any successor release that may be adopted by the Office of Economics and Analytics and the Wireline Competition Bureau after notice and comment). Since 5G networks and the associated handset ecosystem have developed at a greater pace than many had predicted, if the Commission were to continue supporting older technologies, it would risk providing subsidies to support outmoded network technologies that may be limited in their ability to provide the same level of connectivity, and the associated economic benefits, that 5G would likely provide. It is crucial that the whole of America experiences the benefits of 5G, and not just those living in the more urban areas of the country. The Commission seeks comment on this proposal. Should any commenter propose an alternative release, the Commission seeks comment on the costs and benefits of the 5G Fund supporting such an alternative.

A. Two Approaches to a 5G Fund for Rural America

20. The Commission's policy goals for the 5G Fund are premised on its conclusion that universal service funding for the advancement of high-speed robust mobile services to support 5G

technology in rural areas is an appropriate and necessary use of universal service funds. The Commission bases its proposal to implement the 5G Fund on a determination that it should target universal service funding to support the deployment of the highest level of mobile service widely available today—5G. In proposing the implementation of the 5G Fund, the Commission reiterates its commitment to minimizing the overall burden of universal service contributions on consumers and businesses by expending the finite funds available in the most efficient and cost effective manner.

21. The Commission therefore seeks comment on two proposed options for the 5G Fund in order to achieve its policy goals and ensure that reform of mobile high-cost support helps to close the digital divide. On the one hand, the Commission could proceed most quickly to the 5G Fund Phase I auction by identifying those areas that would be eligible for support based primarily on the degree of rurality of each area, and then prioritize support in areas that have historically lacked 3G and 4G LTE services in order to ensure that all Americans are served by 5G networks quickly. The Commission anticipates commencing the Phase I auction as early as next year if it pursues this course. On the other hand, the Commission could take an alternative tack in which it would wait to identify areas eligible for support until it develops improved mobile coverage data through the Digital Opportunity Data Collection proceeding, but potentially at the cost of delaying the 5G Fund Phase I auction and the Commission's reform of the legacy high-cost support program.

22. These two options reflect a fundamental challenge in balancing competing concerns. On the one hand, the Commission recognizes the pressing need for universal service support in rural areas that are sparsely populated, costly to serve, and have historically lacked adequate mobile service, and seeks to ensure that those areas do not fall further behind. The Commission notes that under the legacy high-cost support program, in 12 states and territories—including Indiana, Ohio, Pennsylvania, and Vermont—mobile carriers receive no high-cost support despite such states having extensive rural and/or mountainous areas that are likely to lack adequate mobile service. In an additional seven states and territories—California, Georgia, New Hampshire, South Dakota, Tennessee, Utah, and the

Commonwealth of Northern Mariana Islands—mobile carriers statewide received less than \$1 million per year, or less than one-quarter of 1 percent of legacy high-cost support disbursements, despite all having extensive rural, mountainous, or otherwise hard-to-serve areas. On the other hand, the accuracy of the mobile broadband coverage data that carriers submit to the Commission has been called into question, and the Commission acknowledges the pressing need to reform its mobile coverage data collection to understand more precisely where mobile coverage is truly lacking. Addressing the problems with mobile coverage data would allow the Commission to better target areas in need of support but would delay the disbursement of support to many of those same areas.

23. Binding commitments made by T-Mobile to deploy 5G service to 90 percent of rural Americans (and 99 percent of the population nationwide) within six years will result in extensive 5G coverage across many rural and hard-to-serve areas of the nation, and will inform the Commission's analysis in several respects. *First*, these commitments are measured by population covered rather than a defined geographic area. While the Commission expects that these commitments will result in deployment of 5G service to many areas including areas that may lack 4G LTE service today, based on staff analysis, they could still leave up to approximately 81 percent of the rural land area of the United States uncovered. *Second*, the Commission believes it would be inappropriate to allow the use of high-cost support to fulfill merger conditions, and therefore expect that the support awarded via the 5G Fund would be used to deploy 5G service to areas other than where T-Mobile will deploy. *Third*, if the Commission does not adequately account for T-Mobile's commitments, the Commission risks using finite universal service 5G Fund support to overbuild areas where T-Mobile already has an enforceable obligation to deploy. The Commission seeks comment on these proposals and assumptions, including the costs and benefits of either option.

1. Option A: Funding 5G in Rural America in 2021

24. To implement the Commission's goal of redirecting high-cost support to those areas where voice and 5G broadband service would not otherwise be deployed absent support, the

Commission's proposal under Option A would be to determine eligibility for 5G Fund Phase I support based on existing data sources. This would enable the Commission to move quickly to authorize funding to areas not likely to receive voice and 5G broadband services. As the deployment of 5G service has primarily been focused on urban environments to date, the Commission expects the degree of rurality of an area can provide a reasonable estimate of the areas where 5G is unlikely to be deployed absent federal support. This approach would obviate the need to collect and process new mobile broadband coverage data from carriers and allow for a more rapid disbursement of support to unserved rural areas. The Commission anticipates that under Option A, it would commence the 5G Fund Phase I auction in 2021.

25. *Eligible Areas.* Under this approach, the Commission proposes to make all areas of the country meeting a certain definition of "rural" eligible for 5G Fund support. To identify such areas, the Commission proposes to include any census tract that is part of U.S. Department of Agriculture's Rural-Urban Commuting Area Codes (RUCA) 5-10, except any census blocks within those areas that are urban or water-only. Under this definition, approximately 67 percent of the country's land area would be eligible for support.

26. More specifically, the Commission proposes to distinguish between rural and urban areas based on the most recent decennial U.S. Census Bureau definition of such areas, and proposes to exclude all urban geographic areas. This definition of rural is how such areas were defined for purposes of the T-Mobile-Sprint transaction. The Commission seeks comment on this proposal. In the U.S. Census Bureau data, Urbanized Areas are defined as areas that contain 50,000 or more people, while Urban Clusters are defined as areas that have a population of at least 2,500 people and less than 50,000 people. The Urban-Rural Classification identifies 486 Urbanized Areas and 3,087 Urban Clusters nationwide. Collectively, these urban areas include approximately 81 percent of the population and approximately 3 percent of the land area. The Commission believes both of these areas are likely to receive robust 5G service absent a subsidy. The Commission seeks comment on this view and on other

ways of ensuring that urban or other areas already receiving or poised to receive robust 5G service without subsidy are excluded from eligibility. Urban Areas and Urban Clusters are defined at the census block level, and the Commission proposes to consider as rural any census block that is not classified within an Urban Area or Urban Cluster to help inform the Commission's determination of eligible areas. Water-only blocks are excluded from the Commission's analysis, and the Commission has proposed to exclude Alaska, Puerto Rico and the U.S. Virgin Islands from 5G Fund support. The Commission will include, however, the entirety of American Samoa, Guam, and the Northern Mariana Islands as eligible. The Commission also seeks comment on whether it would be appropriate to exclude from eligibility urban areas that fall within Tribal lands.

27. This definition of rural, while useful as a starting point, is overly broad for determining eligibility for 5G Fund support in and of itself. If the Commission were to rely solely on this classification, approximately 97 percent of the land area of the U.S. would be eligible for 5G Fund support. The Commission therefore proposes to refine this set of eligible areas through a "degree of rurality" to better target funding to where it is needed most.

28. The Commission proposes basing the degree of rurality of any given area on the U.S. Department of Agriculture's Rural-Urban Commuting Area (RUCA) Codes that employ the most recent decennial census data (2010) and the 2006-10 American Community Survey, and to categorize census tracts based on population density, urbanization, and daily commuting patterns. The primary RUCA codes (1-10) "delineate metropolitan, micropolitan, small town, and rural commuting areas based on the size and direction of the primary (largest) commuting flows." In addition, the secondary RUCA codes identify other connections among rural and urban places based on the size and direction of the secondary, or second largest, commuting flow.

29. The Commission expects that the RUCA codes would be able to distinguish those areas of the country that are less likely to receive 5G service absent subsidies, and note that RUCAs are census-tract based, consistent with the geographic areas the Commission proposes to use below as the

minimum geographic area for bidding in the auction. The Commission seeks comment on the costs and benefits associated with the use of RUCAs to help determine eligibility. Does the fact that RUCAs are based on decennial census data affect their usefulness in determining eligibility for support? Which codes should the Commission use to classify areas as rural for the purposes of the 5G Fund and why? Given the urban-rural delineation described above, the Commission proposes to make eligible for support only those areas contained within RUCA codes 5 through 10, where code 5 is defined as micropolitan high commuting: primary flow 30 percent or more to a large Urban Cluster, and code 10 is defined as rural areas: primary flow to a tract outside an Urban Area or Urban Cluster. If the Commission were to use RUCA codes 5 through 10 to identify eligible areas, approximately 67 percent of the land area of the United States (excluding Alaska, Puerto Rico and the U.S. Virgin Islands) would be eligible for 5G Fund support. Alternatively, should the Commission be more or less expansive in its approach, and if so, how?

30. Are there alternative available datasets, such as the Office of Management and Budget's county-based Core-Based Statistical Areas, the U.S. Department of Agriculture's Rural-Urban Continuum Codes, the U.S. Department of Agriculture-Economic Research Service's Frontier and Remote Area Codes, the U.S. Department of Agriculture-Economic Research Service's land use dataset, or others, that the Commission should consider in determining eligible areas? Commenters supporting alternative datasets should address why the supported dataset would be preferable and whether it should be used on its own or in conjunction with other data.

31. In addition, the Commission seeks comment on whether using U.S. Census Bureau population density data, either on its own or in conjunction with the Rural-Urban Commuting Area Codes or alternative datasets as set out above, is an appropriate way to proceed. The Commission requests that commenters provide information on which population density threshold might be the most appropriate and why. For example, the Commission could use a 10 or 20 person per square mile

threshold or higher. The Commission also seeks comment on whether it should consider population density at the census block, census block group, or census tract level, and why.

32. Finally, the Commission seeks comment on any other alternative methodologies or existing data the Commission could use to help identify areas eligible for 5G Fund support that would balance the need to ensure the timely deployment of 5G to rural areas with the need to allocate funding using the best data currently available to the Commission. Apart from determining whether an area is urban or rural for purposes of allocating 5G Fund support, are there any other factors that could help identify where mobile carriers would have an insufficient incentive to build out a 5G network?

33. *Prioritizing Areas that Historically Lack Mobile Service.* In addition to identifying areas eligible for 5G Fund support on the basis of their rurality, the Commission proposes to prioritize among those areas those places that have historically lacked 3G or 4G LTE service, and seek comment on how to identify them. Using high-cost support to deploy voice and 5G broadband service presents different policy challenges than a fund designed to fill in gaps in otherwise expansive coverage. The Commission recognizes, however, that its proposal to define the areas eligible for support without relying on carrier-reported coverage data may capture both areas where 4G LTE service has already been deployed, as well as areas currently lacking any mobile broadband service at all. Closing the digital divide requires a concerted effort to ensure universal service funds support new deployments in previously unserved areas, as well as supporting upgrades of existing networks to new technologies. Areas that have historically lacked 3G or 4G LTE service may therefore require additional focus and higher levels of support in order to ensure that 5G-capable networks are deployed in a timely manner. The Commission seeks comment on this approach.

34. The Commission seeks comment on currently available sources of data that would allow it to best target 5G Fund support to areas that have historically lacked mobile service. The Commission does not believe it should identify areas eligible for support based on existing mobile broadband coverage data because staff has found that these coverage data, submitted both as part of FCC Form

477 and in the one-time Mobility Fund Phase II data collection, do not really reflect actual on-the-ground coverage in many instances. However, because FCC Form 477 coverage data is filed twice per year, the Commission believes it could provide a useful window into which areas were deployed most slowly. The Commission seeks comment on this view, and on the best way to use FCC Form 477 or other mobile coverage data to identify these areas. For example, should the Commission prioritize funding based on coverage at a single point in time, or are there better methodologies the Commission could consider? The Commission also notes that while parties have raised concerns that these data tend to overstate the extent of coverage and therefore should not be used to render areas ineligible, no parties have asserted the data understate the extent of coverage. Are concerns over the accuracy of available coverage data lessened when these data are used for purposes of prioritization? The Commission seeks comment on these issues and on other potential mobile coverage data sources that would help inform which areas should be prioritized due to a historic lack of service.

35. The Commission also seeks comment on how best to prioritize such areas in the 5G Fund auction. For the Rural Digital Opportunity Fund Phase I auction, the Commission effectively increased the reserve price in census blocks lacking even 10/1Mbps service by \$10 per location over census blocks that lack 25/3 Mbps broadband but already have access to 10/1 Mbps service. While the mechanism by which the Commission proposes to calculate prices on a per square kilometer basis in the 5G Fund Phase I auction differs from the Rural Digital Opportunity Fund, the Commission notes that any prioritization could be incorporated into the adjustment factor process the Commission proposes herein. The Commission seeks comment generally on the mechanics of how to prioritize areas that have historically lacked service, as well as on what the appropriate level of prioritization would be. Should such areas receive an upward adjustment of 25 percent, similar to that preference adopted for the Rural Digital Opportunity Fund? Should the Commission also consider multiple levels of prioritization depending on other factors? The Commission seeks comment on these issues.

36. The Commission believes that its proposed approach under Option A is consistent with the requirements of the recently enacted the Broadband Deployment Accuracy and Technological Availability Act (Broadband DATA Act), Pub L. 116-130, 134 Stat. 228 (2020), which among other things requires the Commission to collect mobile coverage data and release mobile broadband deployment maps based upon collected data. The statute requires the Commission to use these maps when awarding new funding to deploy broadband service after the maps have been created. Given the anticipated timeline of the Commission's proposal to define eligibility based upon degree of rurality, the Commission expects that the 5G Fund Phase I auction would close before the creation of the maps required by the statute, obviating the need to use those maps when determining the areas eligible for Phase I. The Commission seeks comment on this view. To the extent that the maps are created prior to Phase II of the 5G Fund, the Commission seeks comment on how to use those maps for any 5G Fund Phase II funding awards.

2. Option B: Collecting New Data Before Funding 5G Rural America in 2023 or Later

37. The Commission also seeks comment on an alternative proposal under which it would delay the Phase I auction, and any support for rural 5G, until the Commission completes work to develop more granular mobile broadband coverage maps in the Digital Opportunity Data Collection proceeding. Under the Commission's Option B approach, the Commission would determine areas eligible for 5G Fund Phase I support only after collecting and processing new mobile broadband coverage data from carriers. The Commission sought comment on ways to improve the accuracy of mobile coverage data submitted by carriers in the *Digital Opportunity Data Collection Order and Further Notice*, 84 FR43705, 43764, Aug. 22, 2019. Additionally, in light of issues raised about the accuracy of the mobile broadband coverage data submitted by carriers for the one-time collection of 4G LTE coverage data in the Mobility Fund Phase II proceeding, staff made specific recommendations on how to improve the collection of mobile coverage data, including by standardizing many of the parameters

carriers use to generate propagation maps. While these issues remain part of an open rulemaking, the Commission anticipates that proceeding will allow it to collect more accurate mobile broadband coverage data in the future. Subsequently, Congress enacted the Broadband DATA Act, largely affirming the Commission's approach to broadband mapping in the Digital Opportunity Data Collection proceeding, including collecting uniform, granular coverage maps from service providers, collecting feedback on the maps from members of the public and from state, local, and Tribal governments, and developing a database of broadband-addressable locations. However, the Commission currently lacks an appropriation from Congress to fulfill its obligations under the Broadband DATA Act and complete mobile broadband coverage maps. Under this approach, the Commission would first collect data and create new mobile broadband coverage maps, before using those maps to identify as eligible those areas that remain unserved on an unsubsidized basis. This would likely result in less expansive and more targeted eligible areas than under the Commission's Option A proposal. However, due to the current lack of appropriated funding, the expected length of time that would be needed to collect, verify, and analyze these data, and to collect and adjudicate objections from members of the public and state, local, and Tribal governments, this approach would also be likely to significantly delay the Phase I auction and disbursement of high-cost support to rural areas, including to those areas that do not currently receive support.

38. The Commission anticipates that the earliest it could conduct the 5G Fund Phase I auction after collecting new coverage data under the Option B approach would be sometime in 2023. Specifically, based on the Commission's experience in deploying new, industrywide map-based data collections, staff has estimated that completing the new statutorily-required rulemaking; developing the IT systems and resources necessary to collect and verify submitted mobile coverage data and allow for a public-facing challenge process (whether done in-house or via contract); collecting, verifying, and analyzing the coverage data; and collecting and adjudicating any challenges to these data would add at least 18-24 months to the auction process, even if Congress were to appropriate sufficient

funds to implement the Broadband DATA Act. The Commission seeks comment on this view and on whether there are additional things it should consider that could shorten that process.

39. *Areas Eligible for 5G Fund Support.* Under this approach, the Commission would propose to make eligible for 5G Fund support all areas of the country where mobile 5G service would be unlikely to be offered in the absence of high-cost support using new carrier-reported mobile broadband coverage data. To identify such areas, the Commission proposes that any area that updated coverage data show lacks 4G LTE service by an unsubsidized carrier would be eligible for 5G Fund support. As part of this proposal, the Commission would use legacy high-cost support subsidy data from the Universal Service Administrative Company (USAC) that define each recipient's subsidized service areas to determine whether an area would have service by an unsubsidized carrier. The Commission notes that current 5G deployments in rural areas are a relatively greenfield state and seeks comment on whether it should use 5G deployment data to identify eligible areas under this approach. Would basing eligibility on where 4G LTE has yet to be deployed without support, nearly 10 years after the technology was first deployed, serve as a better indicator of where 5G service would similarly not be deployed absent support? The Commission seeks comment on this proposal and its assumptions. Should the Commission adopt a broader definition to identify areas that should be eligible for 5G Fund support, such as areas where coverage data show lack 5G service? Or should the Commission also consider historical 4G LTE coverage data to include as eligible areas that did not see 4G LTE deployment within a shorter duration, such as within five years? If so, how would the Commission mitigate issues with the accuracy of historical coverage data?

40. In light of the Commission's proposed definition of eligibility for 5G Fund support under this approach, the Commission expects it would not be necessary to further prioritize areas that have historically lacked 3G or 4G LTE service as these areas would be identified in the new carrier-reported mobile coverage data. The Commission seeks comment on this conclusion or whether there are other metrics by which the Commission should prioritize certain areas under Option B, similar to Option A, if

the Commission has more expansive eligible areas than proposed herein. If so, how should the Commission identify such areas? The Commission seeks comment on these issues.

B. Framework for the 5G Fund

41. The general framework that the Commission proposes for the 5G Fund would remain largely the same under either eligibility and auction timing proposal. However, where the Commission's two eligibility framework proposals differ materially, the Commission discusses the implications of each on the proposed auction structure.

1. Term of Support

42. The Commission proposes a term of support of 10 years for each phase of the 5G Fund, with monthly support disbursements. As the Commission recently explained in adopting a 10-year support term for the Rural Digital Opportunity Fund, a 10-year term of support encourages long term investment and was partially responsible for the robust participation that occurred in the successful Connect America Fund Phase II (CAF Phase II) auction. The Commission expects that the same incentives would apply here. The Commission seeks comment on this proposal. Does a 10-year term of support for each phase of the 5G Fund help encourage more bidders—particularly smaller wireless carriers—to participate in a 5G Fund auction? Commenters should specifically address whether a 10-year term of support is appropriate for the 5G Fund in light of the significant capital and effort needed to deploy and upgrade high-speed, mobile broadband networks in rural areas, and whether a 10-year term of support is consistent with the timeframe used by rural carriers to plan and schedule network buildout. Alternatively, commenters should discuss whether a different term of support is appropriate and explain the specifics of their proposal.

2. Budget

43. The Commission proposes a total budget of up to \$9 billion for the 5G Fund, which would be awarded in two separate phases, with the first phase targeting support to eligible rural areas and the second phase focusing on harder to serve and higher cost areas, such as farms and ranches,

specifically targeting deployments that would facilitate precision agriculture. Of this budget, the Commission proposes that Phase I of the 5G Fund would include up to \$8 billion, of which the Commission proposes to reserve \$680 million for service to Tribal lands. The Commission proposes to exclude areas in Alaska, for which high-cost support is provided via the Alaska Mobile Plan adopted in the *Alaska Plan Order*, 81 FR 69772, Dec. 7, 2016, as well as areas in Puerto Rico and the U.S. Virgin Islands territories, for which high-cost mobile support is provided as described in *PR-USVI Fund Report and Order*, 84 FR 59937, Nov. 7, 2019, where the Commission is already making available high-cost support, including for 5G mobile broadband, from the areas that would be eligible to receive support from the 5G Fund. The Commission seeks comment on these proposals and on alternatives to them. To establish how much support would be available in the 5G Fund Phase I auction, the Commission also seeks comment on whether it should reduce the total budget of Phase I of the 5G Fund by an amount equivalent to the amount of funds that would be necessary to cover the overall phase down of legacy support. Current legacy high-cost support received by mobile carriers is approximately \$382 million per year, excluding Alaska, Puerto Rico, and the U.S. Virgin Islands. Should the Commission deduct the funds necessary to cover the phase down of this support from the total amount of support it offers for eligible areas in the Phase I 5G Fund auction?

44. The up to \$8 billion budget the Commission proposes for Phase I of the 5G Fund is premised, in part, on repurposing the \$4.53 billion budget adopted for Mobility Fund Phase II, which intended to redistribute the amount of legacy support mobile carriers would receive over the next decade, outside of Alaska, Puerto Rico, and the U.S. Virgin Islands, combined with a recognition that significant additional financial resources will be needed to accomplish an undertaking of this kind. Although the current level of legacy support of approximately \$382 million per year has decreased from when the Mobility Fund Phase II budget was adopted, the Commission nonetheless proposes to repurpose the entire \$4.53 billion Mobility Fund Phase II budget, and seeks comment regarding how much additional funding may be needed to best achieve the Commission's policy objectives. The

Commission notes that unlike the Mobility Fund Phase II budget, which was designed to fund the remaining areas of the country that were not served by 4G LTE (estimated at that time to be approximately 19 percent of the land area of the U.S.), under Option A, the Commission is proposing to support 5G deployment to potentially a significantly larger part of the country (approximately 67 percent of the land area of the U.S.) and, consequently, budget needs would be higher. While it remains unclear how much of the country would be eligible for 5G Fund support under the Commission's alternative Option B proposal, given the apparent overstatement of existing coverage data, the Commission anticipates that the areas unserved by 4G LTE could be substantially larger than originally estimated once it collects more accurate mobile broadband coverage data.

45. The Commission notes that its proposals for the 5G Fund budget are meant to ensure auction competition and efficient distribution of limited universal service support. Considering T-Mobile's extensive commitments to deploy 5G services and the proposals, discussed below, to remove T-Mobile's planned deployment areas from the auction, the Commission seeks comment on whether budgeting \$8 billion for Phase I of the 5G Fund may reduce the efficiency of the auction and whether a smaller budget for Phase I of the 5G Fund would be more appropriate. Considering the scope of the areas that would be eligible to compete for support, does the budget the Commission proposes for Phase I of the 5G Fund cost-effectively incentivize carriers to participate in the auction in order to deploy 5G consistent with the public interest obligations it proposes for the fund?

46. The Commission's proposal would make at least an additional \$1 billion, as well as any unawarded funds from Phase I of the 5G Fund, available for the budget of Phase II of the 5G Fund. Phase II of the 5G Fund specifically would seek to target funds support toward the deployment of technologically innovative networks that provide 5G service and would facilitate precision agriculture. The Commission proposes a budget of at least \$1 billion for Phase II of the 5G Fund because it recognizes that significant resources may be necessary for carriers to commit to network buildout in the hardest to serve rural areas, like farms and ranches. The Commission anticipates that dedicating at least

\$1 billion to this second phase of funding would allow the Commission not only to close the remaining digital divide but also direct funds to innovative agricultural solutions, increasing the nation's economic efficiency and encouraging economic growth in rural areas. Reliable, advanced mobile broadband network deployment capable of providing 5G service is crucial to the adoption of smart farm and precision agriculture technologies because vast areas of croplands in rural areas currently remain unserved. The Commission also anticipates that Phase II of the 5G Fund would build off of what is learned from the Commission's Precision Agriculture Task Force, a cross-agency federal advisory committee comprised of public and private stakeholders in the agriculture and technology fields.

47. The Commission recognizes that achieving its universal service objectives is an ongoing process. As technologies and service levels evolve, fulfilling the Commission's objective of supporting 5G service that is reasonably comparable to service available in urban areas means continually assessing the need to support services that compare to the ever-improving standard of 5G service provided in urban areas. The Commission anticipates reassessing the budget for the 5G Fund Phase II auction following the 5G Fund Phase I auction. We seek comment on these budget proposals as well as any alternatives, including associated methodologies, for how to appropriately size the 5G Fund Phase I and Phase II budgets. Commenters offering alternatives to the Commission's budget proposals should support their proposals and should address if they have accounted for the phase down of legacy support as well as how their proposed budget(s) would ensure that the Commission remains a responsible steward of finite universal service fund resources.

3. Support for Tribal Lands

48. *Tribal Lands Preference.* The Commission recognizes the distinct challenges of ensuring that Tribal lands are provided with 5G service. To address these difficulties, the Commission seeks comment on a proposed approach to incorporating a Tribal lands preference into the 5G Fund auctions.

49. Under the Commission's proposed approach for Phase I, up to \$680 million of the proposed \$8 billion Phase I budget would be made available to support networks serving eligible areas

in Tribal lands. This amount would double the amount that the Commission had estimated it would reserve to support Tribal lands from the Mobility Fund Phase II budget and is in accord with the proposed 5G Fund budget of up to \$9 billion, which is approximately double the total Mobility Fund Phase II budget. Only eligible areas on Tribal lands would be assigned support under the reserved Tribal lands budget. Bidding for funding under the Tribal reserve budget and bidding for support under the unreserved portion of the budget would take place simultaneously as part of a single auction. Bids would be considered separately for support under the Tribal budget and the unreserved budget until the point at which total requested support for eligible Tribal lands could be accommodated under the Tribal budget, thus determining the areas that would win support under the Tribal reserve. Bidding would continue in order to determine winners under the unreserved budget. Any unused funds from the Tribal reserve would be added to the unreserved budget, and any new bids for Tribal areas would then compete with bids for non-Tribal areas under the combined overall budget.

50. The Commission seeks comment on the benefits and potential drawbacks of this approach to establishing a separate Tribal reserve that would be made available first to Tribal lands, to the extent there are successful bidders willing to use these funds to serve Tribal lands. Under this proposal, the price at which support to areas assigned under the Tribal reserve would likely be higher than the price at which support would be assigned under the unreserved budget. The extent of the differential price effect would depend on the relative levels of competition in Tribal and non-Tribal areas.

51. The Commission asks commenters to consider whether the proposed separate Tribal reserve budget would significantly advance the Commission's goal of promoting 5G service to Tribal lands. If a commenter believes that another approach would better balance the Commission's interest in assigning funds under the 5G Fund in a cost effective manner with the Commission's interest in overcoming the distinct challenges of expanding 5G service to Tribal lands, the Commission asks that the commenter explain in detail the suggested alternative and reasons for preferring that approach.

52. *Identifying Tribal Lands.* The Commission proposes to identify those areas considered to be Tribal lands for high-cost purposes broadly in line with the Tribal areas identified in the Lifeline program. The high-cost program rules define Tribal lands as “any federally recognized Indian tribe’s reservation, pueblo or colony, including former reservations in Oklahoma, Alaska Native regions . . . as well as Hawaiian Home Lands” For the Lifeline program, the Commission interpreted these same terms to correspond with geographic boundaries of the map of Hawaiian Home Lands maintained by the Department of Hawaiian Home Lands, the U.S. Census Bureau’s American Indians and Alaska Natives Map, the Oklahoma Historical Map (1870-1890), as amended by the Commission to include the Cherokee Outlet, and the Alaska Native regions established pursuant to the Alaska Native Claims Settlement Act. The Commission proposes to use these same mapping resources in the 5G Fund, to the extent applicable, as it has used in the context of the high-cost program.

53. More specifically, the Commission proposes to use the most recent boundary data available for this purpose published by the U.S. Census Bureau as the primary source for identifying the boundaries of Tribal lands for the 5G Fund. The American Indian, Alaska Native, Native Hawaiian (AIANNH) data associate a particular Tribal area with a unique Tribe using a four-digit census code identification number and also include a flag indicating whether each area is recognized by a State or the Federal Government. For purposes of defining Tribal boundaries in the 5G Fund, the Commission proposes to only include areas that the AIANNH data indicate are federally recognized. In addition to using the Census Bureau’s AIANNH boundaries, the Commission proposes to include the boundaries of all census blocks wholly contained within areas identified as Tribal for the enhanced Lifeline support areas in Oklahoma (based upon the Oklahoma Historical Map (1870-1890)), using the most recent census block boundary data available for this purpose. While support to carriers in Alaska is proposed to be outside the scope of the 5G Fund, the Commission’s proposal would define Tribal lands more generally throughout the high-cost program. The Commission also proposes to include the Census

Bureau's Alaska Native Regional Corporation boundaries so as to define as Tribal land those areas in Alaska that are not part of the AIANNH boundaries.

54. The Commission proposes to modify the definition of Tribal lands for the high-cost program to allow for the designation of certain non-Tribal lands as Tribal, similar to the rules for the Lifeline program. Using this designation process, and consistent with waivers previously granted by the Commission to expand the definition of Tribal land in the Commission's rules to also include certain areas of a tribe that do not otherwise meet the definition, the Commission proposes to designate as Tribal land those areas within the study area boundaries of the Eastern Navajo Agency and Sacred Wind Communications in New Mexico. This approach would allow so-called "checkerboard" Tribal and non-Tribal land areas in this section of New Mexico to be aggregated as Tribal lands for purposes of the high-cost program and the 5G Fund, consistent with past Commission waivers. The Commission seeks comment on this proposal.

55. Under the Commission's proposal, all Tribal land with the same four-digit census code within the minimum geographic area for bidding would be grouped together to allow bidders to bid on Tribal areas grouped by Tribe. For Tribal land that is not part of the Census Bureau's federally-recognized AIANNH boundaries, the Commission proposes to assign such land the census code for the appropriate tribe. Specifically, the Commission proposes to identify as part of the Navajo Nation the portions of the study area boundaries of the Eastern Navajo Agency and Sacred Wind Communications in New Mexico that fall outside of any Tribal boundary from the Census Bureau's data. The Commission also proposes to identify the portions of census blocks wholly contained within the enhanced Lifeline support areas in Oklahoma that fall outside of any Tribal boundary identified by the Census Bureau with the Cherokee, Iowa, Kickapoo, and Pawnee tribes as appropriate based upon the "former reservations in Oklahoma" identified in the Oklahoma Historical Map (1870-1890). Because there is no individual Alaska Native village associated with areas in Alaska that are not part of the AIANNH boundary data, the Commission proposes to identify these areas with the appropriate Alaska Native Regional Corporation

identifier. The Commission seeks comment on these proposals and whether this process is sufficient to identify Tribal lands for the 5G Fund and the high-cost program generally.

4. A Multi-Round, Descending Clock Auction

56. The Commission proposes to rely on its existing general rules regarding competitive bidding for universal service support, with specific procedures to be developed through its standard Public Notice process. The Commission seeks comment on whether it should consider any modifications to this approach for the purposes of a 5G Fund auction.

57. For Phase I of the 5G Fund, the Commission proposes to use a multi-round, descending clock auction to identify which carriers would receive support in which areas and the amount of support that each winning bidder would be eligible to receive. The Commission proposes that this descending clock auction would consist of sequential bidding rounds according to an announced schedule providing the start time and closing time of each bidding round. The Commission proposes to use bidding procedures similar to those used in the auction framework adopted for the Rural Digital Opportunity Fund, and adopted in the *CAF Phase II Auction Order*, 81 FR 44413 (Jul. 7, 2016) and used in the CAF Phase II auction. The Commission proposes a multi-round auction to enable bidders to adjust their bidding strategies over the course of the auction so as to create viable aggregations of geographic areas in which to construct networks.

58. The Commission proposes that bids for 5G Fund support would be accepted and winning bids would be determined based on a support price per adjusted square kilometer. That is, each eligible area would have an associated number of adjusted square kilometers reflecting particular factors such as difficult terrain and other relevant factors affecting the cost of providing service to the area. Support amounts for an area would be determined by multiplying an area's associated adjusted square kilometers by the relevant price per square kilometer. For example, an area with 100 square kilometers and an adjustment factor of x would have $100 \cdot x$ adjusted square kilometers. This approach

would ensure that carriers bidding to serve the hardest-to-serve parts of the country can compete efficiently and fairly in the auction.

59. As is the Commission's usual practice, during the pre-auction process, if the Commission adopts its proposal regarding the auction objective and design, the Commission would seek comment on and adopt an opening price per adjusted square kilometer that is high enough that even carriers requiring a very high level of support will be able to compete in the auction. The opening clock price, multiplied by an area's adjusted square kilometers, would represent the highest support amount that a winning bidder could receive in the auction. The same opening price, in dollars per adjusted square kilometer, would apply to all the eligible areas in the auction. The clock price would be decremented in subsequent rounds of the auction, implying lower support amounts for each area. Since the opening clock price is intended to serve as a starting point for bidding and not an estimate of final prices, the Commission anticipates that the opening price that it proposes would be based on rough estimates of the cost of providing service to hard-to serve areas, taking into account any adjustments that are adopted. The Commission invites comment here on the best approach to estimating a reasonable starting point for bidding in the 5G Fund Phase I auction.

60. If the Commission adopts its proposal to establish a separate budget reserved for Tribal lands, it proposes to use an integrated bidding process to assign support from both the Tribal lands reserved budget and the unreserved 5G Fund Phase I budget, using a single price clock that would apply to bids for support under both budgets. Bid processing procedures would ensure that the Tribal reserve budget would clear at a price per adjusted square kilometer that is not less than the price at which the unreserved budget would clear, and as a result, winning bids under the Tribal reserve budget would begin to be assigned at support prices that were no less, and potentially greater than, the prices at which bids under the unreserved budget could be assigned. Absent a decision to establish a separate budget for Tribal lands, the bidding system would consider all bids on a dollars per adjusted square kilometer basis for assignment under the overall budget. As the Commission did for CAF Phase II, and as

adopted for the Rural Digital Opportunity Fund, the Commission proposes to leave the detailed clock auction bidding and bid processing procedures to be established in an auction procedures public notice after notice and an opportunity for comment during the pre-auction process.

61. The Commission also proposes to include all eligible areas nationwide in the 5G Fund Phase I auction, so that bidders compete for support across all areas at the same time.

62. For the 5G Fund Phase II auction, the Commission proposes using a similar multi-round, descending clock auction format to identify the areas that would be served, the winning bidders, and the support amounts they would receive with bids being compared based on a price per square kilometer. The Commission further proposes that any bidding preferences would be implemented using the approach it addresses here: by setting aside a portion of the budget to be assigned based on competition across areas qualifying for the preference, as considered here for Tribal lands in Phase I of the 5G Fund, or through an adjustment to the number of square kilometers (or other units) associated with the geographic area.

63. The Commission seeks comment on all these proposals for the 5G Fund Phase I and Phase II auctions. The Commission also seeks comment on whether there are any rule changes that it should consider for a 5G Fund auction that would lead to greater efficiency or better outcomes for the 5G Fund and rural consumers.

5. Minimum Geographic Area for Bidding

64. The Commission proposes generally to use census tracts containing areas eligible for 5G Fund support as the minimum geographic area for bidding in an auction. That is, the Commission proposes to overlay the eligible areas with U.S. Census Bureau census tracts boundaries, and have bidders in a 5G Fund auction bid for support to serve the eligible areas within each census tract. The Commission seeks comment on this proposal. The Commission also seeks comment on whether areas larger than census tracts, such as counties, may be more suitable as biddable items for 5G Fund support.

Alternatively, would use of a different geographic unit, which could provide for more targeted bidding, be more appropriate, especially for smaller wireless carriers?

65. Further, the Commission proposes removing from any 5G Fund auction any tracts that have *de minimis* eligible areas, defined as an area of one square kilometer or less within the tract, because the Commission believes there would be little or no demand for these areas and that the amount of the winning bid associated with such areas would likely be too small to pay out. The Commission seeks comment on this proposal. Commenters should discuss the costs and benefits associated with each approach.

66. Because the Commission proposes to allocate funds reserved for support to Tribal lands from a separate Tribal lands budget, if it adopts that approach, the Commission would also need to identify the tracts or partial tracts containing eligible areas that coincide with the area of a specific Tribal entity. To do this, the Commission proposes to overlay the boundaries of Tribal lands for each federally-recognized Tribal entity, as set forth below, on the eligible areas within each census tract if the Commission ultimately adopts a separate Tribal lands budget. Thus, under this proposal, the minimum geographic area for bidding would be census tracts, split by Tribal land, containing areas eligible for 5G Fund support. The Commission seeks comment on this proposal.

6. Adjustment Factor

67. The Commission proposes to incorporate an adjustment factor into the 5G Fund auction design and the methodology for disaggregation of legacy support that would assign a weight to certain geographic areas. Such weighting would reflect, among other things, the relative cost of serving areas with differing terrain characteristics as well as the potential business case for each area. Given the Commission's wide discretion to distribute universal service funding in a way that serves the public interest, it proposes to use an adjustment factor to help distribute 5G Fund and legacy support to a range of areas across the country that are geographically and economically diverse.

68. The Commission does not intend to have an adjustment factor capture the full differences between the costs and benefits of providing service to different types of geographic areas. The Commission proposes to cap the adjustment factor if needed to ensure the funding allocation determined by the auction is both equitable and efficient. The Commission seeks commenters' views on its proposal to adopt an adjustment factor.

69. In the Order adopted concurrently with this NPRM, the Commission directs the Office of Economics and Analytics and the Wireline Competition Bureau to propose and seek comment on adjustment factor values and the underlying methodologies that could be used to develop them. To inform their proposals, the Commission recommends that the Office of Economics and Analytics and the Wireline Competition Bureau use data from several sources including the U.S. Geological Survey, historical coverage and infrastructure deployment data received by the Commission, data from the U.S. Census Bureau, spectrum holdings information, Mobility Fund Phase I auction data, and other data as necessary.

7. Transitioning from Legacy Support to 5G Fund Support

70. The Commission proposes a general framework for transitioning from legacy high-cost support to 5G Fund support that would reform mobile high-cost support while minimizing the disruption to carriers currently receiving legacy support.

71. As an initial matter, the Commission tentatively concludes that the 5G Fund would constitute a comprehensive mechanism for mobile high-cost support that serves as an alternative to Mobility Fund Phase II. Similar to the Commission's conclusions in the *PR-USVI Fund Report and Order* for the Uniendo a Puerto Rico Fund and the Connect USVI Fund, the Commission likewise tentatively concludes that the 5G Fund is consistent with statutory restrictions on the Commission's authority to modify the rules for legacy high-cost support. We seek comment on these tentative conclusions.

72. *Geographic Flexibility for Legacy Support.* The Commission seeks comment on allowing a mobile competitive eligible telecommunications carrier (ETC) receiving legacy high-cost support for a

particular subsidized service area the flexibility to use such support for the provision, maintenance, and upgrading of facilities and services within any of the designated service areas for which it receives legacy high-cost support, regardless of whether those areas span more than one state, only during the limited period of time until the Commission transitions away from legacy support. While the Commission generally limits the scope of where high-cost support received for a particular service area can be used, the Commission believes that, in these special circumstances, continuing to restrict legacy support recipients to using the legacy high-cost support received for a particular service area only within that service area may not be in the public interest in all cases. More specifically, since the freeze in legacy high-cost support in 2012, the amount of legacy support a carrier receives for a particular service area no longer has any nexus to the cost of providing service in that area. Unlike mobile competitive ETCs receiving legacy high-cost support, recipients of the Commission's modernized funding mechanisms receive specific, predictable, and sufficient support amounts determined either by competitive bidding, a cost model, or the carrier's own reported costs to meet the recipients' obligation to deploy, provision, and maintain voice and broadband services across their designated service areas. Allowing a mobile competitive ETC the flexibility to reallocate its use of legacy high-cost support amongst its subsidized service areas could allow a carrier to make more efficient decisions about its use of support considering the current costs of providing service in high-cost areas, while still satisfying the statutory obligation to use such support for its intended purposes. The Commission seeks comment on providing this flexibility and on whether it is consistent with the Commission's overall universal service goals.

73. *Disaggregation of Legacy Support.* Similar to the approach the Commission took in the *Mobility Fund Phase II Report and Order*, the Commission proposes to use high-cost disbursement data from USAC that define the subsidized service area for each legacy support recipient to determine the areas in which legacy support is currently provided. USAC tracks the amount of support disbursed for each legacy support recipient's subsidized service area (a "study area") and the wire centers in each study area where the carrier has been designated as an ETC. The Commission expects that USAC will

prepare and release maps of each legacy support recipient's subsidized service areas by combining these high-cost data with wire center boundary data. These high-cost subsidized service area boundaries would form the basis of our disaggregation process. Because high-cost support is disbursed by USAC for a carrier's entire subsidized service area, whereas the Commission's proposed 5G Fund transition framework would treat legacy support differently in different portions of a recipient's service area—for example, in eligible and ineligible portions of the area as well as in eligible areas where support is won and where there is no winner—the Commission must be able to disaggregate legacy support. For this purpose, the Commission would overlay the boundaries of eligible areas and the minimum geographic area for bidding over each legacy support recipient's service area. The Commission would subdivide the geographic boundary data for each carrier's subsidized service area into the smallest constituent piece for which support must be disaggregated and transitioned separately. More specifically, the Commission proposes to overlay on each carrier's subsidized service area boundary data: (a) the eligible area boundaries; (b) the minimum geographic area for bidding, e.g., census tract boundaries; and (c) the subsidized service area boundary data for other legacy support recipients. The Commission would then calculate the percent area for each constituent piece in order to allow us to disaggregate and apportion the legacy high-cost support amount for each area. In the Order adopted concurrently with this NPRM, the Commission directs the Office of Economics and Analytics and the Wireline Competition Bureau to propose and seek comment on how to apply an adjustment factor to these disaggregation steps to account for the relative costs of providing mobile service, as well as whether and how any adjustment factor should differ between bidding and the disaggregation process.

74. *Carriers Eligible to Receive Legacy Support.* In the interim period before legacy support is fully transitioned to 5G Fund support, the Commission proposes to clarify that only terrestrial mobile wireless carriers may receive mobile high-cost support. Consequently, carriers offering non-terrestrial services, such as mobile-satellite service, would not be eligible to receive legacy support. Under the Commission's proposal, any legacy support recipient that would no longer be eligible to receive support

would cease to receive legacy support after the effective date of an order adopting this requirement. This proposal would not, however, prevent an affected carrier from bidding for, and winning, new 5G Fund support in the auction, provided that it is otherwise eligible. The Commission seeks comment on this proposal.

75. *Legacy Support Transition Schedule.* As part of the 5G Fund framework, the Commission proposes a schedule to transition each legacy support recipient's disaggregated legacy support to 5G Fund support that is broadly analogous to the schedule adopted in the *Mobility Fund Phase II Report and Order* for Mobility Fund Phase II, with some differences. Similar to Mobility Fund Phase II, legacy high-cost support would be converted to 5G Fund support, maintained for no more than five years to preserve service, or subject to phase down over two years depending upon whether the area was eligible for 5G Fund support and if eligible, whether there was a winning bidder for the area in the auction. For legacy support that is subject to two-year phase down, support would be provided at two-thirds of the level of the disaggregated legacy support for the first 12 months, and one-third of the level of the disaggregated legacy support for the next 12 months. All legacy high-cost support in areas subject to phase down would end no later than two years after announcement of the conclusion of the auction.

76. Notwithstanding the general transition schedule that the Commission proposes, however, it additionally propose that all legacy high-cost support to mobile carriers at the frozen identical support level would cease no later than five years after the effective date of an order adopting this proposal, regardless of when 5G Fund Phase I auction is conducted. Specifically, any mobile carrier that continues to receive legacy high-cost support not subject to the two-year phase down would cease to receive such support no later than the first day of the month five years after effective date of an order adopting this requirement. In making this proposal, the Commission notes that it originally anticipated that the legacy support structure would end in 2017, but for the pause in phase down and delay in awarding support through the Mobility Fund Phase II auction. By setting an absolute date on

which legacy support to mobile carriers would cease, the Commission takes steps to help align the incentives of current legacy support recipients with the Commission's goal of transitioning such support to 5G Fund support using competitive bidding. The Commission seeks comment on this proposal and on whether its proposal adequately incentivizes a rapid transition away from the inefficient legacy support structure. Should the Commission commensurately push back the date on which legacy support would cease if it adopts its approach under Option B to collect new coverage data before proceeding to the 5G Fund Phase I auction?

77. Under the transition schedule that the Commission proposes, in areas determined not to be eligible for 5G Fund support, legacy support would be phased down starting the first day of the month after the effective date of an order adopting these requirements and release of the final list of areas eligible for 5G Fund support. This proposal differs from the transition schedule adopted in the *Mobility Fund Phase II Report and Order*, because, unlike in that proceeding, where the final set of eligible areas could not be known until the conclusion of the Mobility Fund Phase II challenge process, under Option A the proposed areas that would be eligible for 5G Fund support would be determined concurrent with adoption of these proposed rules, or under Option B would be determined at some point soon after collecting new mobile broadband coverage data. Since the Commission expects that carriers would not require support in order to deploy 5G service in areas ineligible for 5G Fund support, and legacy support recipients would not be able to win 5G Fund support in the auction for those areas, the Commission tentatively concludes that it would not be in the public interest to continue legacy support for ineligible areas. The Commission seeks comment on this proposal.

78. For areas that would be eligible for 5G Fund support, on the first day of the month following the release of a public notice announcing the close of the 5G Fund Phase I auction, legacy support for current recipients would either be maintained, pending authorization of the carrier to receive 5G Fund support (for the winning bidder in the Phase I auction), maintained in order to preserve service (for one legacy support recipient in areas without a winning bidder in the Phase I auction), or

subject to phase down (for all other legacy support recipients). That is, for eligible areas that are not won in the 5G Fund Phase I auction, legacy support would begin to phase down over two years or be maintained in order to preserve service for no more than five years after the Phase I auction closes regardless of whether the eligible area may be won in the 5G Fund Phase II auction. In eligible areas won in the 5G Fund Phase II auction, legacy support (whether subject to phase down or preservation-of-service support) would either be maintained, pending authorization of the carrier to receive 5G Fund support (for the winning bidder in Phase II), or be subject to phase down (for all other legacy support recipients) beginning the first day of the month following release of a public notice announcing the close of the 5G Fund Phase II auction. Legacy high-cost support subject to phase down after the 5G Fund Phase I auction would continue to follow the original phase down schedule that commenced after the close of the 5G Fund Phase I auction for support recipients that were not the winning bidder in eligible areas won during the 5G Fund Phase II auction. If the carrier receiving maintenance of support in order to preserve service is not the winning bidder in the 5G Fund Phase II auction for an eligible area won during the 5G Fund Phase II auction, that carrier would begin to receive phased down support at this time. Under this proposal, legacy high-cost support maintained to preserve service after the 5G Fund Phase I auction would continue for eligible areas not won during the 5G Fund Phase II auction.

79. More specifically, for a winning bidder that is receiving legacy support in the area of its bid, the Commission proposes that legacy support would cease and 5G Fund support would commence on the first day of the month following release of a public notice authorizing the carrier to receive 5G Fund support. If the winning bidder defaults on its bid prior to the authorization of support, or is denied such authorization, the Commission would not award 5G Fund support for that area. However, to avoid adverse incentives and consistent with our proposal to maintain support to preserve service only in areas that lack a winning bid, a carrier that currently receives legacy support in the area of its winning bid would not receive preservation-of-service support and would instead be subject to phase down if the carrier defaults on its bid prior to authorization or is denied such authorization.

80. For winning bidders that do not receive legacy high-cost support in the areas of their winning bids, 5G Fund support would commence on the first day of the month following release of a public notice authorizing the winning bidder to receive 5G Fund support. For a winning bidder that is not an ETC in an area it won in a 5G Fund auction, the Commission would not authorize the winning bidder to receive 5G Fund support until it has been designated as an ETC in that area. Instead, only after it has been designated as an ETC for that area could the winning bidder be authorized to receive 5G Fund support.

81. In eligible areas where there is no winning bidder in a 5G Fund auction, the Commission proposes that the legacy support recipient receiving the minimum level of sustainable support would continue to receive such support until further Commission action, but for no more than five years after the first day of the month following the effective date of an order adopting this requirement, in line with the Commission's proposal to cease all legacy support within five years. The Commission proposes to define the minimum level of sustainable support to be the lowest amount of legacy support among carriers that have deployed the highest level of mobile technology within the state. The Commission seeks comment on this proposal and whether these are the best metrics by which to measure deployment in order to ensure service continues in eligible areas not won during the auction.

82. The following chart summarizes the Commission's proposed schedule to transition from legacy support for areas in the 5G Fund Phase I auction. Consistent with the existing high-cost disbursement schedule, all legacy support transition schedule timing would be aligned to the first day of the month following a triggering action.

Transition Schedule for Legacy High-Cost Support to 5G Fund Support

Eligibility	Auction Result	Bidder or Recipient Status	Support Type & Timing
Ineligible			2-year phase down commences after effective date of rules and release of final eligible areas
Eligible	Won in auction	Carrier is the winning bidder but does not receive legacy support for the area it won	5G Fund support commences after auction close and bidder is authorized
Eligible	Won in auction	Carrier is the winning bidder and is a legacy support recipient for the area it won	Legacy support ceases and 5G Fund support commences after close of the auction and bidder is authorized for area
Eligible	Won in auction	Carrier is a legacy support recipient but is not the winning bidder in the area for which it receives support	Legacy support ceases and 2-year phase down commences after auction close
Eligible	Not won in auction	Carrier is a legacy support recipient but does not receive the minimum level of sustainable support for the area for which it receives support	Legacy support ceases and 2-year phase down commences after auction close
Eligible	Not won in auction	Carrier is a legacy support recipient and receives the minimum level of sustainable support for the area for which it receives support	Legacy support continues for no more than 5 years after effective date of rules

83. The Commission seeks comment on this framework generally and its proposed schedule to transition from legacy support to 5G Fund support. The Commission seeks comment on whether, in order for a legacy support recipient to be eligible to have its support maintained under the preservation-of-service rule for a particular area, it should require the carrier to participate in the 5G Fund Phase I auction and place a bid on that area. The Commission also tentatively concludes that legacy support recipients should be subject to additional public interest obligations and performance requirements to continue to receive legacy support in order to make sure that those primarily rural areas do not fall behind. The Commission seeks comment on this framework and proposed schedule to transition from legacy support to 5G Fund support. The Commission also seeks comment on proposed alternative frameworks and transition schedules.

8. Public Interest Obligations and Performance Requirements for Legacy High-Cost Support Recipients and 5G Fund Support Recipients

84. The Commission proposes that both legacy high-cost support recipients and 5G Fund support recipients would have a public interest obligation to provide 5G service alongside the voice service for which high-cost support is provided, and to meet measured performance requirements as a condition of receiving support. Specifically, the Commission proposes to require 5G Fund support recipients to provide mobile, terrestrial voice and data services that comply, at a minimum, with 5G-NR technology as defined by 3GPP Release 15 (or any successor release that the Office of Economics and Analytics and the Wireline Competition Bureau may require 5G Fund support recipients to comply with after notice and comment). The Commission proposes that mobile wireless carriers receiving 5G Fund support must also meet minimum baseline performance requirements for data speed, data latency, and data allowance. These proposals should ensure that rural areas receive service comparable to high-speed, mobile broadband available in urban areas. In accord with the *USF/ICC Transformation Order and Further Notice*, the Commission also proposes to require legacy support recipients to meet public interest obligations and performance requirements that would ensure the deployment of 5G network technology in each carrier's subsidized service areas. Specifically, under the Commission's proposal, legacy support recipients would be required to provide voice and data services that comply with the same 5G-NR technology required for 5G Fund support recipients.

85. *Public Interest Obligations, Performance Requirements, and Reporting Requirements for Legacy Support Recipients.* To ensure that the most advanced mobile services are available in all areas where a carrier is currently receiving legacy high-cost support, the Commission proposes to establish additional public interest obligations, performance requirements, and reporting requirements that such recipients must meet in order to continue receiving legacy support. In the *USF/ICC Transformation Order and Further Notice*, the Commission anticipated that if the phase down of high-cost support were halted at any point during the transition to a more efficient distribution of funding, the Commission

would adopt additional mobile broadband public interest obligations and performance requirements for continued receipt of such support.

86. The phase down was halted in 2014 and since that time legacy support recipients have received approximately \$2 billion in high-cost support without having to meet any specific broadband deployment obligations. The absence of broadband public interest obligations and performance requirements does a disservice to rural Americans living in areas served by legacy support recipients because the Commission's rules require high-cost recipients to use support "only for the provision, maintenance, and upgrading of facilities and services for which the support is intended" and do not specify that such recipients must deploy the most current wireless technologies or expand their services to meet current standards. Indeed, because support levels were frozen at the end of 2011 based on the now-eliminated identical support rule and no service obligations are in place, legacy support recipients may be incentivized to reduce services to increase profit margins. Moreover, these current circumstances can create incentives against the reform of legacy, inefficient support and the refocusing of the Commission's limited universal service funds on unserved rural areas. Accordingly, today the Commission proposes to meet its stated intention in the *USF/ICC Transformation Order and Further Notice* and ensure that all Americans living in areas served by legacy support recipients receive the most advanced wireless services.

87. *Initial Report of Current Service Offerings.* To better understand the services current mobile recipients of legacy high-cost support are offering in their subsidized areas, the Commission tentatively concludes that each legacy support recipient should be required to file an initial report describing its current service offerings in its subsidized service areas and how the legacy support it is receiving is being used. The Commission tentatively concludes that this report would be required to be filed no later than three months after the Commission receives Paperwork Reduction Act approval for this requirement following its adoption.

88. *Adoption of Public Interest Obligations and Performance Requirements for Legacy*

Support Recipients. The Commission tentatively concludes that it should adopt additional, broadband-specific public interest obligations and performance requirements for all current mobile legacy high-cost support recipients and that these obligations and requirements, as an interim step before the 5G Fund auction, should largely mirror the requirements for 5G Fund support recipients. Such action will ensure that rural Americans do not get left behind simply because they are served by a mobile legacy high-cost support recipient. To ensure that recipients of legacy high-cost support meet their public interest obligation to provide 5G service in their subsidized service areas, the Commission proposes to adopt interim and final service milestones to monitor their progress in meeting the performance requirements by the established deadlines, and propose that a legacy support recipient meet the same minimum baseline performance requirements for data speed, latency, and data allowance ultimately adopted for 5G Fund support recipients. The Commission also proposes that legacy support recipients have the same public interest obligations as it proposes for 5G Fund support recipients to provide 5G service at reasonably comparable rates, an allow collocation and voice and data roaming.

89. The Commission proposes requiring that current legacy support recipients provide 5G broadband service that meets the established performance requirements for legacy support recipients to at least 85 percent of the square kilometers in their subsidized service areas in each state by a final service deployment milestone deadline at the end of the fourth full calendar year after the effective date of an order adopting this requirement. The Commission notes that the Rural Wireless Association, which represents a number of legacy support recipients, has indicated that its members have used high-cost support to upgrade their networks to 4G LTE and would be willing to deploy 5G service in their subsidized service areas if such high-cost support continues. Because the infrastructure necessary to provide high speed broadband likely exists throughout the subsidized service areas of many legacy support recipients, the Commission expects that 5G service could be deployed more quickly than for a greenfield buildout. As such, the Commission believes that legacy support recipients that continue to

receive support, including under the preservation-of-service rule, should be able to reasonably deploy 5G broadband service throughout their subsidized service areas within four years. However, because it may not be feasible for a legacy support recipient to deploy 5G service in areas where legacy support is being reduced, the Commission proposes to exempt from this requirement any portion of a carrier's subsidized service area where the legacy support recipient is subject to a two-year phase down of legacy high-cost support.

90. The Commission seeks comment on these proposals. If it moves forward with our Option A approach, the Commission seeks comment on whether these public interest obligations and performance requirements should be delayed from taking effect until after release of the final list of areas eligible for support in the 5G Fund Phase I auction, in light of the Commission's proposal to exempt ineligible portions of a legacy support recipient's subsidized service area from these obligations. In contrast, the Commission does not anticipate delaying these obligations if it moves forward with its Option B approach, given that release of the final eligible areas may be delayed by two years or more. Would delaying these public interest obligations and performance requirements until the Commission has final eligible areas under either proposal be consistent with its goal of ensuring that rural areas that continue to receive legacy high-cost support do not fall behind?

91. The Commission also proposes that legacy support recipients meet interim service deployment milestones prior to the final service milestone. Specifically, a current legacy support recipient must provide 5G broadband service that meets the established performance requirements for legacy support recipients service to at least 40 percent of its subsidized service areas by the end of the second full calendar year after the effective date of an order adopting this requirement, and to at least 60 percent of their subsidized service areas by the end of the third full calendar year after the effective date of an order adopting this requirement. The Commission proposes to require that legacy support recipients certify and demonstrate that they have met their service deployment milestones by meeting certain requirements as a measurement of performance within their subsidized areas using the same

process the Commission ultimately adopts for 5G Fund support recipients. The Commission tentatively concludes that legacy high-cost support will not be provided to legacy support recipients that do not meet the established performance requirements by the applicable service deployment milestone deadlines. Should the Commission instead adopt a tiered non-compliance framework for legacy support recipients that fail to meet these proposed performance requirements similar to what the Commission proposes for 5G Fund support recipients that fail to meet their performance requirements? The Commission also seeks comment on whether these obligations should be amended or refined to specify different percentages of service to Tribal lands within a legacy support recipient's subsidized service areas to ensure customers residing on Tribal lands would receive service as the preceding obligation and milestones are met.

92. *Annual and Interim Reporting Requirements for Legacy Support Recipients.* The Commission tentatively concludes that current mobile recipients of legacy high-cost support should be required to file reports regarding their efforts to provide 5G services throughout their subsidized service areas that meet the proposed public interest obligations and performance requirements. Specifically, the Commission tentatively concludes that for as long as a legacy support recipient receives legacy support, it should be required to file an annual report by July 1 in each year that includes updated information about the legacy support recipient's current service offerings in its subsidized service areas and how legacy support is being used to provide 5G services in these areas, and a certification that the legacy support recipient is in compliance with the public interest obligations and all of the terms and conditions associated with the continued receipt of legacy support disbursements. These annual reports would be filed with USAC via a web portal, and USAC would make all such data available to the Commission and state/Tribal governmental agencies. The Commission also tentatively concludes that each legacy support recipient should be required to file interim milestone reports and a final milestone report by March 1 of the calendar year following each applicable service milestone demonstrating that it has deployed 5G service that meets the performance requirements adopted for legacy support

recipients. These interim milestone reports would be filed with USAC via a web portal, and USAC personnel would be responsible for verifying submitted data to determine compliance with the established performance requirements for legacy support recipients. The Commission seeks comment on these proposed reporting requirements.

93. Should the Commission exempt legacy support recipients that receive a *de minimis* amount of support from the public interest obligations and performance requirements it adopts for legacy support recipients, and if so, what level of support would be *de minimis*? Instead of requiring certain 5G broadband service coverage requirements, should the Commission require that legacy support recipients use an increasing percentage of their support toward deployment of 5G service? If so, how should the Commission measure compliance? The Commission seeks comment on these approaches and, if adopted, would direct the Office of Economics and Analytics and the Wireline Competition Bureau to establish, through a separate notice and comment process, the procedures used to verify legacy support recipients' compliance with these public interest obligations and performance requirements.

94. *Ensuring Auction Competitiveness.* The Commission recognizes that the current legacy high-cost support levels are unrelated to the costs of deploying 5G service, and seeks comment generally on ways to stimulate robust competition in the 5G Fund auction, especially from legacy support recipients in the service areas for which they are subsidized. How can the Commission ensure that legacy support recipients are incentivized to participate in the 5G Fund auction? Should the Commission require that legacy support recipients whose subsidized service areas are eligible in the 5G Fund auction bid on these areas to be eligible to have such support preserved in case the area remains unsold in the auction? The Commission seeks comment on these matters.

95. One party has suggested that the Commission consider an alternative mechanism offering current legacy high-cost support recipients that have fewer than 500,000 subscribers the option to continue to receive such support in return for deploying 5G service. In order to properly align the

incentives to ensure auction competitiveness, should the Commission adopt such an alternative, or a similar mechanism by which legacy support recipients have an opportunity to accept reduced support, in return for the Commission removing from the 5G Fund auction areas that would otherwise be eligible for support? If we were to adopt such a process, what would be an appropriate subscriber count cutoff to determine which legacy support recipients are small carriers? How much of our proposed 5G Fund budget should be set aside for this purpose, and would such a mechanism ensure that the Commission's limited universal service funds are best spent to expand 5G service? What would be the costs and benefits of either of these mechanisms? Are there better means by which the Commission can encourage a rapid transition to 5G Fund support for legacy support recipients that also ensures 5G service deployment in areas that do not receive 5G Fund support? Preliminary high-cost support data from USAC show that significant portions of the subsidized service areas of many legacy support recipients overlap each other, and continuing to disburse support to more than one carrier to cover the same area would be at odds with the Commission's proposal to award 5G Fund support to only a single carrier. Additionally, under the Commission's proposed definitions for 5G Fund eligible areas, some portion of the subsidized service area of legacy support recipients may not be eligible for 5G Fund support. If the Commission were to consider offering legacy support recipients the option to continue to receive support, it seeks comment on whether to exclude subsidized service areas where more than one carrier receives legacy support, as well as areas that are not eligible for 5G Fund support. If a legacy support recipient were to decline this offer, should that carrier be ineligible to continue to receive support under the preservation-of-service rule proposed above? The Commission seeks comment on these matters and any alternatives to ensure the alignment between its tentative conclusion to adopt additional public interest obligations and performance requirements for current recipients and ensuring a competitive auction.

96. *Public Interest Obligations and Performance Requirements for 5G Fund Support*

Recipients. To ensure that 5G Fund support recipients meet their public interest obligation to provide

5G service in areas where they receive support, the Commission proposes to adopt interim and final service milestones to monitor their progress in meeting the performance requirements by the established deadlines. Specifically, the Commission proposes that a support recipient must meet minimum baseline performance requirements for data speed, latency, and data allowance by the applicable deadlines. In addition, support recipients would have a public interest obligation to provide their 5G service at reasonably comparable rates and allow collocation and voice and data roaming throughout the 10 year support term. The service milestones the Commission proposes for the 5G Fund are similar to those adopted for the Rural Digital Opportunity Fund, CAF Phase II, and in the Uniendo a Puerto Rico Fund and the Connect USVI Fund proceeding.

97. For interim service milestones, the Commission proposes that a 5G Fund support recipient must commercially offer service that meets the established 5G performance requirements to at least 40 percent of the total square kilometers associated with the eligible areas for which it is authorized to receive 5G Fund support in a state by the end of the third full calendar year following authorization of support, to at least 60 percent of the total square kilometers by the end of the fourth full calendar year, and to 80 percent of the total square kilometers by the end of the fifth full calendar year. Additionally, in accord with the Commission's decision in the *Rural Digital Opportunity Fund Report and Order* to adopt an optional early service milestone for the Rural Digital Opportunity Fund, it proposes to adopt an optional early service milestone for the 5G Fund, which would allow a support recipient to reduce the value of its letter of credit if it offers service that meets the established 5G performance requirements to at least 20 percent of the total square kilometers in its winning bid areas in a state by the end of the second full calendar year following funding authorization. The Commission also proposes to align the service milestones with those of other high-cost programs to minimize the administrative burdens on the Commission, USAC, and support recipients. Accordingly, regardless of when a 5G Fund recipient is authorized to begin receiving support, the Commission proposes that each service milestone would occur on December 31. This proposal is consistent with the Wireline

Competition Bureau's recent *CAF Phase II Auction Recipients' Deployment and Reporting Deadlines Aligned Order*, 35 FCC Rcd 109 (2020), that established uniform milestone deadlines for CAF Phase II auction support recipients and the Commission's decision in the *Rural Digital Opportunity Fund Report and Order* to adopt consistent milestone deadlines for the Rural Digital Opportunity Fund. The Commission acknowledges that by proposing to align the 5G Fund interim and final service milestones deadlines with those of other high-cost programs, some 5G Fund support recipients could possibly have more than three years to complete their first interim milestone. The Commission seeks comment on these proposals.

98. The Commission also proposes that a 5G Fund support recipient must provide service that meets the established 5G performance requirements to at least 85 percent of the total square kilometers associated with the eligible areas for which it is authorized to receive 5G Fund support in a state by a final service milestone by the end of the sixth full calendar year following authorization of support. This proposed final service milestone is similar to the final buildout requirement adopted in the *USF/ICC Transformation Order and Further Notice for Mobility Fund Phase I*. In addition, the Commission proposes that by the final service milestone, a 5G Fund support recipient would need to demonstrate that it provides service that meets the established 5G performance requirements to least 75 percent of the total square kilometers within each biddable area (e.g., census block group or census tract) for which it is authorized to receive support. The Commission seeks comment on these proposals. The Commission also seeks comment on whether there are additional measures it could adopt that would help ensure that 5G Fund support recipients would meet their interim and final service milestones.

99. *Data Speed*. The Commission seeks comment on the minimum network speeds that 5G Fund support recipients should be required to deliver. In the *PR-USVI Fund Report and Order*, the Commission required support recipients to provide speeds of 35/3 Mbps, and the Commission seeks comment on whether it should adopt that requirement here. The Commission believes that such

speeds would be achievable for carriers that only have access to low-band spectrum, as may be the case in rural areas, and seek comment on this view. Should the Commission adopt a higher performance requirement, such as 50/5 Mbps? Would higher speeds be feasible for rural areas, given the spectrum available to carriers? Do the benefits to rural consumers of requiring higher network speeds outweigh the potential costs of meeting those requirements? Should the Commission's proposed speed requirement increase over time to account for the likely pace of improvements in 5G service to well-served areas? The Commission also seeks comment on how to best quantify these speed requirements statistically, e.g., if these speeds should be specified as median, mean, or another percentile of probability, and how these variations can be accounted for over the total extent of the coverage area.

100. *Minimum Cell Edge Requirements.* In addition to requiring deployment of 5G service with download and upload speeds of at least 35 Mbps and 3 Mbps, the Commission proposes to require that carriers deploy service in eligible areas with a minimum cell-edge download speed of 7 Mbps and a minimum cell edge upload speed of 1 Mbps, with a 90 percent coverage probability and a 50 percent cell loading factor. The Commission anticipates that these proposed requirements would ensure that the desired typical user experience in areas supported by the 5G Fund would be realistically attainable over the broad coverage area supported by the 5G Fund. The Commission seeks comment on this proposal, including the specific cell edge throughput, probability, and cell loading values proposed. Are these cell edge values appropriate to ensure performance across the cell area that would be adequate to meet the Commission's proposed 35 Mbps/3 Mbps data speed requirement?

101. Alternatively, should the Commission require different cell edge coverage probability and cell loading targets, such as 80 percent cell-edge coverage probability or 30 percent loading? Should the Commission require a lower cell loading value because rural environments may experience typical loading levels lower than 50 percent? Should the Commission require a different cell-edge minimum download and upload speed? Should the Commission require a minimum spectral efficiency (bps/Hz) metric, and if so, what should it be, and should it be considered in addition to, or as an

alternative to, the download and upload speeds mentioned above? If the Commission adopts a minimum spectral efficiency metric, should this metric vary based upon the spectrum band used? What higher spectral efficiency (bps/Hz) improvements for 5G compared to 4G LTE are possible at the edge of (and overall for) rural cell sites? The Commission also seeks comment on whether these data speed and minimum cell edge requirements should be re-evaluated during the 5G Fund term as technologies continue to improve and speeds become faster.

102. *Latency.* The Commission proposes to require networks in eligible areas supported by the 5G Fund to have a latency of 100 milliseconds or less per round trip, a latency value referred to in the *Rural Digital Opportunity Fund Report and Order* as “low latency.” The Commission seeks comment on this metric, including comment on whether the deployment of 5G technology should alter the Commission’s proposed latency requirements. The Commission proposes that measurement of latency be implemented using a standalone user device-based application which initiates and terminates round trip time measurements between the user device and specified test servers. The Commission seeks comment on this proposal. The Commission also seeks comment on the network reference points between which the latency measurement should be conducted, and whether to specify the protocol layer, type, length, and number of packets. The Commission seeks comment on whether this latency requirement should decrease over time to account for the likely pace of improvements in 5G service to well-served areas.

103. *Data Allowance.* To ensure that rural consumers have access to service plans comparable to those offered in urban areas, the Commission proposes that 5G Fund support recipients must provide at least one service plan in eligible areas that includes a data allowance that would correspond to the average United States subscriber data usage. The Commission seeks comment on this proposal. The Commission also recognizes that industry and consumer practices regarding usage levels will evolve over time, especially as consumer internet usage continues to be dominated by video consumption. The Commission seeks comment on what type of service plan would fulfill this

purpose—would one equivalent to a mid-level plan offered by a nationwide provider suffice? The Commission also seeks comment on when during the support term it should set this requirement, and what data allowance proposal would be high enough to ensure that rural consumers have access to service plans comparable to those offered in urban areas. Should the data allowance the Commission adopts increase over time, for instance at the interim service milestones it establishes for deployment of service? What data, and what data sources, should the Commission use to establish the monthly data allowance? Commenters should include current industry data to support any proposed standard, and should comment on the likely availability of a data source that would continue to be updated during the proposed 10-year term of the 5G Fund program.

104. The Commission also seeks comment on whether to establish a cap on the maximum data usage allowance that would be required for the final service milestone, and, if so, what industry data should be considered and incorporated into the calculation of a cap. If commenters disagree with the possibility of an increase of the data usage allowance requirement during the 5G Fund support term, they should explain why the 5G Fund standard should remain static even if, as anticipated, significant increases in average data usage occur in the industry over the next 10 years. Commenters supporting the adoption of a specific metric for the final service milestone prior to the auction should provide details regarding why a specific metric is suitable. Finally, if a data usage allowance for the final service milestone was to be established prior to the auction, the Commission seeks comment on how that allowance metric should be determined, including which data sources should be used.

105. *Reasonably Comparable Rates.* The Commission proposes, consistent with section 254(b)(5) of the Communications Act of 1934, as amended (Act), to require that 5G Fund support recipients have a public interest obligation to offer their services in eligible rural areas at rates that are reasonably comparable to rates they offer in urban areas. In the *USF/ICC Transformation Order and Further Notice*, the Commission concluded that, as a condition of receiving federal high-cost universal service support, all recipients of such support must offer broadband service in their supported area that

meets certain basic performance requirements at rates in rural areas that are reasonably comparable to rates offered in urban areas. For both voice and broadband services, the Commission considers rural rates to be “reasonably comparable” to urban rates under section 254(b)(3) of the Act if rural rates fall within a reasonable range of urban rates for reasonably comparable voice and broadband services.

106. As an initial matter, the Commission proposes to define “urban” for this purpose using the same urban/rural definition as used in the initial step for defining eligible areas for the 5G Fund auction, which is based on the 2010 U.S. Census Bureau delineation. The Commission seeks comment on how it should determine if a carrier’s rates are reasonably comparable to those it offers in urban areas. For instance, should the Commission conclude that if a carrier is offering the same rates, terms, and conditions (including usage allowances, if any, for a specified rate) to both urban and rural customers, then it would fulfill the requirement that its rates are reasonably comparable? The Commission also seeks comment on whether a carrier should be able to demonstrate it provides reasonably comparable rates if one of its stand-alone voice plans and one service plan offering data are substantially similar to plans offered in urban areas. In addition, in cases where a 5G Fund recipient does not serve urban areas and therefore must compare its rates to those of a different mobile carrier, the Commission seeks comment on how the 5G Fund recipient should identify the carrier and specific rate plans upon which it is basing its compliance certification, and what it should submit as corroborating evidence of reasonably comparable rates, such as information from the urban provider’s web page or other marketing materials. All ETCs must advertise the availability of their voice services through their service areas, and the Commission requires support recipients also to advertise the availability of their broadband services within their service area. The Commission seeks comment on these proposals.

107. *Collocation and Voice and Data Roaming.* To ensure that support recipients do not use public funds to achieve unfair competitive advantage, the Commission proposes to adopt a public interest obligation that would require the same general collocation and voice and data roaming

obligations that the Commission adopted for Mobility Fund Phase I, with certain minor changes. The Commission proposes that during the 10-year 5G Fund term, support recipients be required to allow reasonable collocation by other carriers of services that would meet the technological requirements of the 5G Fund on all 5G network infrastructure constructed with Universal Service Fund support that it owns or manages in the area for which it receives support. In addition, during this period, the Commission proposes that the recipient may not enter into facilities access arrangements that restrict any party to the arrangement from allowing others to collocate on the 5G network infrastructure. The Commission reminds participants that during the 10-year 5G Fund term, support recipients must comply with the Commission's voice and data roaming requirements in effect as of the adoption of 5G Fund rules on networks that are built through 5G Fund support.

9. Reporting Requirements

108. Consistent with the requirements adopted for CAF Phase II and the Rural Digital Opportunity Fund, the Commission proposes that a 5G Fund support recipient must submit an annual report certifying its compliance with the public interest obligations, performance requirements, and any other terms and conditions associated with receipt of 5G Fund support. The Commission further proposes that a support recipient must also file interim and final service milestone reports demonstrating that it has met the 5G Fund performance requirements for deployment of service. The Commission also proposes a rule that would require a support recipient authorized to receive 5G Fund support and its agents to retain any documentation prepared for, or in connection with, the award of the 5G Fund support for a period of not less than 10 years after the date on which the support recipient receives its final disbursement of 5G Fund support.

109. *Annual Reports.* The Commission proposes that a 5G Fund support recipient be required to file an annual report by July 1 of each year after each year in which it was authorized to receive 5G Fund support. The Commission proposes that a support recipient's annual report would cover the preceding calendar year and that the support recipient would be required to certify that it has

complied with the public interest obligations, performance requirements, and any other terms and conditions associated with receipt of 5G Fund support in order to continue receiving 5G Fund disbursements. The annual report would be filed with USAC via a web portal, and USAC would make all such data available to the Commission and state and Tribal governmental agencies. The Commission seeks comment on this proposal, including the length of time the web portal should be open to receive annual certifications each year. The Commission retains its authority to look behind recipients' annual reports and to take action to address any violations.

110. *Interim and Final Milestone Reports.* The Commission proposes that 5G Fund support recipients must collect and submit speed test data in interim and final service milestone reports, in accordance with the guidelines outlined below, and as developed further in the Digital Opportunity Data Collection proceeding that is considering more broadly applicable standards. The service milestone reports would include data to demonstrate compliance with the interim and final service milestones and the performance requirements for the 5G Fund. The Commission proposes that these reports would be submitted to USAC, as adopted for CAF Phase II and the Rural Digital Opportunity Fund. USAC personnel would be responsible for verifying submitted data to determine compliance with 5G Fund requirements. The Commission invites comment on proposed guidelines for testing and on alternatives.

111. The Commission seeks comment on whether it should standardize the network performance testing and coverage mapping methodologies used by 5G Fund recipients to report on their compliance service milestones. As a general matter, the Commission has been taking steps to achieve standardization in testing, mapping, and reporting of mobile broadband deployment. In its decision to conditionally approve the transaction between T-Mobile and Sprint, the Commission made clear that the approval of the transaction would be conditioned on the network buildout commitments of the licensees to provide 5G service to a large portion of the U.S. population, including rural areas, and these commitments include the submission of drive test results and coverage maps to the Commission at three- and six-year milestones. Further, the staff report concerning the investigation of the Mobility

Fund Phase II 4G LTE coverage data submitted by certain carriers revealed significant discrepancies between coverage maps generated by carriers whose networks were tested and the actual, on-the-ground mobile experience, as measured by staff speed tests. Commission staff therefore recommended that, for proceedings in which the Commission collects mobile broadband deployment data, it should further standardize the propagation map parameters and assumptions that carriers use to generate their coverage data and require the submission of actual on-the-ground evidence of performance alongside coverage maps. Similarly, the Commission sought comment in its *Digital Opportunity Data Collection Order and Further Notice* on what additional steps the Commission should take to obtain more accurate and reliable mobile broadband deployment data. The Commission also notes that detailed validation processes have been implemented in other recent universal service auction proceedings. Consistent with the Commission's past efforts to encourage the use of consistent methodologies to verify buildout, the Commission proposes particular methods for 5G Fund support recipients to demonstrate provision of required performance and coverage.

112. The Commission proposes that a support recipient's interim and final service milestone reports would be due by March 1 of the calendar year following each applicable December 31 milestone deadline. The Commission proposes that failing to timely submit a service milestone report that includes the required representative data and certification concerning performance and coverage requirements by the established deadline would subject support recipients to defined consequences (as specified in the non-compliance proposal herein). Consistent the requirements adopted for CAF Phase II and the Rural Digital Opportunity Fund, the Commission further proposes that if a support recipient has not met the established performance requirements by the applicable service milestone deadline, it must inform the Commission, USAC, and the relevant state, U.S. Territory, or Tribal government, if applicable, in writing within 10 business days that it has failed to meet an interim or the final service milestone.

10. Demonstrating Compliance with Performance Requirements

113. The Commission proposes to require that 5G Fund recipients certify and demonstrate that they have met service deployment milestones by meeting certain requirements as a measurement of performance within a 5G Fund support area. More specifically, the Commission proposes to require that recipients demonstrate performance using a combination of predictive propagation modeling and comprehensive on-the-ground measurement testing. The Commission notes that comprehensive on-the-ground measurement testing would likely be the most accurate measure of performance in a carrier's coverage area; however, the scale and cost of relying solely on this method, especially to measure performance in particularly difficult terrain, may be overly burdensome. Conversely, propagation modeling may offer an efficient alternative, with less expense, for predicting performance (including download and upload speeds), but such results may not accurately reflect coverage and the on-the-ground consumer experience. The Commission is mindful that rural areas, which may have few roads and difficult terrain, would likely be the most costly areas for a carrier to drive test, and such tests still may not reach large areas that have coverage but are less accessible for drive tests. The Commission's proposal therefore includes a combination of measurement testing and carefully defined propagation modeling as a balanced approach to achieve reasonable coverage performance verification accuracy with reduced costs and logistical burdens. The Commission seeks comment on this approach to verifying compliance. The Commission notes that Ofcom in the United Kingdom has taken a similar combined approach to verifying compliance with coverage performance obligations. While Ofcom's specific requirements may be different from those the Commission may ultimately adopt, the Commission seeks comment on this overall combined approach and methodology including coverage prediction of user speeds.

114. Under the Commission's proposal, 5G Fund support recipients would be required to use predictive propagation modeling to generate and submit milestone coverage maps showing the areas where 5G service has been deployed. While recognizing that carriers' planning methodologies may

differ somewhat, the Commission proposes to standardize many of the propagation model parameters across 5G Fund recipients. Specifically, the Commission would require that milestone coverage maps must be generated to show cell edge coverage with minimum download and upload speeds of 7 Mbps and 1 Mbps, respectively, with 90 percent probability and 50 percent loading. The Commission also would require that milestone maps show where 35 Mbps/3 Mbps or better service is available. As part of this proposal, the Commission would also require that 5G Fund recipients generate coverage maps that take into account terrain and clutter, and use terrain and clutter data with a resolution of 100 meters or better. The Commission seeks comment on its proposal and these technical specifications. Are there other propagation model parameters that would be necessary to standardize for 5G Fund recipients to show successful deployment or that would improve the accuracy of predictive coverage maps? While recipients may use a variety of propagation models, including proprietary and non-public models, to design and deploy their networks, should the Commission require that all support recipients submit coverage maps using a common coverage model, such as Irregular Terrain Model (ITM), to validate coverage? What are the costs and benefits of such an approach?

115. The Commission would also require comprehensive on-the-ground measurement testing as part of this proposal. Specifically, the Commission would require that 5G Fund recipients conduct and submit speed test measurement data demonstrating compliance with coverage requirements. The Commission proposes to evaluate the sufficiency of measurements by first overlaying a uniform grid of one square kilometer (1 km by 1 km) grid cells on the carrier's propagation model-based coverage maps. The Commission would then require that the measurement data include at least three measurements per square kilometer grid cell predicted to have coverage to demonstrate compliance with coverage requirements. The Commission seeks comment on this testing density, or on whether any alternative measurement approach would be better. Under the Commission's proposal, each reported speed test would be required to include, at a minimum, download speed, upload speed, signal strength, latency, and packet loss measurements. Median speeds for measured grid cells would

be compared to the area for which support was awarded. The Commission would require that the median reported speed tests show measurements with download and upload speeds of at least 35 Mbps and 3 Mbps, respectively, in those areas marked as offering such service. The Commission would also require that measurements at the cell edge show minimum download and upload speeds of 7 Mbps and 1 Mbps, respectively, for 90 percent of the cell-edge tests. The Commission proposes that at least 96 percent of the speed tests in the cumulative speed test data submitted for each construction milestone have a data latency of 100 milliseconds or less roundtrip from the device to the edge of the service provider network and back. The Commission seeks comment on these proposals and the potential burden that may be imposed by requiring three measurements per grid cell. To the extent these data are burdensome to collect, the Commission seeks comment on the costs and benefits of requiring these data, and whether there are alternatives to allow the Commission to accurately verify coverage.

116. The Commission seeks comment on alternative approaches to how testing could be performed such that the Commission would have confidence that the milestone coverage speeds are met without testing every square kilometer of the 5G Fund area. Is it possible to sample sufficient drivable or accessible areas and, based on the comparison of those results to the coverage map, determine if the Commission can have confidence in the full coverage map? What ratio of 1 km by 1 km grid cell samples to coverage area would be required to have confidence in the predictions of the coverage map? Is it possible, for example, to achieve 96 percent or greater confidence in expected user speeds on coverage maps, with say 15 percent of the grid cells in a covered area with recorded speed test measurements that cover important terrain features, and imputed (calculated) median speeds in each of the other grid cells in the covered area (85 percent of the area grid cells)? The Commission seeks comment on this and alternative measurement methods that balance the desire for limiting the cost and complexity of speed test measurement campaigns, with the desire for high confidence in the resulting maps.

11. Milestone Map Supporting Data

117. The Commission also proposes to require that 5G Fund recipients submit supporting data in addition to their milestone coverage maps so that USAC can evaluate and verify compliance with coverage performance requirements. The Commission proposes the collection of system level data to validate the performance and architecture of the funded network. The Commission also proposes to require the submission of a complete link budget showing the relationship between the coverage map signal strength prediction and the required minimum download and upload speeds. Submitted link budgets would include all of the parameters necessary to verify the coverage map, including signal to noise ratio (SNR) assumptions for downlink and uplink per spectrum band. Additionally, the Commission proposes to require that 5G Fund recipients submit information on the propagation model employed to design the 5G network coverage areas. Would these submissions provide sufficient information for milestone report validation or should the Commission also require specific network information such as information on cell site deployments in the coverage areas, including location, antenna height, antenna type, antenna gain, antenna orientation, antenna downtilt, antenna multiple-input and multiple-output (MIMO) configuration, emitted isotropic radiated power, operating frequency band(s), channel bandwidth (including possible carrier aggregation), Reference Signal Received Power (RSRP) signal strength, and any other data required to verify coverage maps? If the Commission requires specific cell site deployment information, should it also require information on backhaul type, backhaul capacity, backhaul oversubscription ratio, and a functional network diagram? The Commission further proposes that 5G Fund recipients provide a narrative on both cell sites and network capacities with traffic engineering assumptions and how the overall network, as built, could meet the performance requirements and scale for future growth. The Commission seeks comment on these proposals. Are these data necessary if the Commission ultimately adopts requirements in the Digital Opportunity Data Collection for the same or similar information from mobile carriers? How should the Commission align these requirements with any future mobile broadband coverage data collections?

118. Alternatively, to avoid transmitting large quantities of commercially sensitive service provider proprietary data to USAC, should the Commission instead provide 5G Fund recipients a standard propagation model (software), e.g., point-to-point Irregular Terrain Model (ITM), and user throughput calculation software, so that 5G Fund recipients could produce terrain-based coverage maps based on parameters that mirror recipients' proprietary software coverage predictions without transferring proprietary, site-specific data to USAC? The Commission seeks comment on this alternative, including the parameters of such modeling and calculation software.

119. The Commission proposes that these data and maps be submitted to USAC by the service milestone reporting deadlines to determine if the service milestone has been met. Cumulative data would be used for the service milestone determinations in years four, five, and six for 5G Fund support recipients. For legacy high-cost support recipients, cumulative data would be used for the service milestone determinations in years two, three, and four. Deployment of service that meets established performance requirements may be achieved by a 5G Fund support recipient earlier than its interim and final required milestones. An area for which successful speed test data has been presented at an earlier milestone need not be tested again to show continuing compliance with performance requirements; however, the Commission proposes that support recipients have an annual obligation to certify continuing provision of service meeting the established public interest obligations adopted for the 5G Fund. The Commission proposes that at least 96 percent of the speed tests in the cumulative speed test data submitted for each construction milestone would be required to have a download speed of 7 Mbps and 1 Mbps upload speed and a latency of no greater than 100 ms roundtrip. The Commission proposes that tests must be distributed across all drivable areas of the cell coverage area, including both cell center and cell edge where possible. The Commission seeks comment on how many measurements, or what percentage of total required measurements, must be conducted at the cell edge. The Commission proposes requiring that recipients' milestone reports include all speed test

measurements collected within the calendar year ending on the relevant December 31 milestone deadline. The Commission seeks comment on these proposals.

12. Coverage Area Measurement Methodology

120. To verify compliance with milestone deployment, the Commission proposes that it would review submitted coverage and speed test data. The Commission proposes that speed tests must be conducted using a device certified by the 5G Fund recipient as compatible with its 5G network. The Commission proposes that each speed test be taken between the hours of 6:00 AM and 12:00 AM (midnight) local time and within the calendar year ending on the relevant construction milestone period. Should a network load simulator be required to provide sufficient comparison to busy hour network congestion? The Commission proposes that speed tests must be taken outdoors, and that speed tests would only be counted if they fall within the area for which 5G Fund support was awarded. While the Commission proposes to require that test data be taken outdoors, how should it consider data collected at stationary locations versus mobile in-vehicle tests? Because low speed or stationary throughput measurements are typically higher than high mobility throughput measurements, should the Commission mandate a mixture of in-vehicle and stationary measurements? How can the Commission ensure that the speed test measurements represent the typical user case for the area covered?

121. The Commission notes that, regardless of the measurement methodology employed by a 5G Fund recipient, large areas of the recipient's coverage area may not be accessible via road due to the rural nature of the target areas. In general, the number of measurements across a rural area are likely either to be sparse compared to the total area or potentially unduly burdensome to collect. Are there methods of testing non-drivable/non-accessible areas, such as technological features like minimization of drive testing or measurement campaigns conducted via drone, that the Commission should consider? What parameters, such as vehicle speed and height above ground, should be specified to ensure that the test represents the user experience?

13. Testing Measurement Application Development

122. Speed tests supporting 5G Fund recipients' coverage maps could include downlink, uplink, latency, and signal strength measurements and be performed using an end-user application that measures performance between the mobile device and specified test servers. In support of its Measuring Mobile Broadband efforts, the Commission developed and released the FCC Speed Test App. This app measures the download and upload speed of a given connection in bits-per-second-per-hertz (bps), latency, and packet loss by performing data transfer from/to a target test node selected from a specified set. The test operates for a fixed duration and reports download and upload throughputs and latency values. There are many smartphone apps which report signal strength and data speeds; however, due to the inherent fluctuations of the RF environment, an app that reports instantaneous signal strength or download speed does not necessarily represent the overall user experience. The Commission seeks comment on specifying apps and methodologies that will ensure consistent and comparable measurements. Should the Commission consider developing an app to be used to verify coverage? Should its use be required, and if so, should there be any exceptions to its use, for example if there are features within a 5G network that allow for extraction of the performance requirements? The Commission seeks comment on these issues.

C. Eligibility Requirements

123. The Commission proposes requiring parties seeking 5G Fund support to satisfy eligibility requirements that are consistent with those adopted for Mobility Fund Phase I, CAF Phase II, and the Rural Digital Opportunity Fund. The Commission seeks comment on its proposals and on any other suggested eligibility requirements. If commenters suggest other eligibility requirements, they should be specific and explain how those requirements would serve the ultimate goals of the 5G Fund. While the Commission proposes eligibility requirements, it also seek comment on ways the Commission can encourage participation in competitive bidding by the widest possible range of qualified parties.

1. ETC Designations

124. Only ETCs designated pursuant to section 214(e) of the Act are eligible to receive support from the high-cost program. However, consistent with the rules adopted for the CAF Phase II auction and the Rural Digital Opportunity Fund, the Commission proposes to permit an applicant seeking to participate in a 5G Fund auction to be designated as an ETC after it is announced as a winning bidder for a particular area. For the CAF Phase II auction, the Commission did not limit bidding in the auction only to ETCs, however, it required all winning bidders to obtain an ETC designation that covers all of the areas in which they won support prior to being authorized to receive support. The Commission therefore proposes that entities applying to bid in a 5G Fund auction would not be required to be ETCs at the time of the short-form application filing deadline, but that winning bidders would be required, within 180 days after the release of the public notice announcing winning bidders, to obtain an ETC designation from the relevant state commission, or this Commission if the state commission lacks jurisdiction, that covers each of the geographic areas in which they won support. The Commission expects that allowing entities that are not ETCs to apply to bid in a 5G Fund auction may improve competition in the auction by encouraging participation from entities that may be hesitant to invest resources in applying for an ETC designation without knowing if they would be likely to win 5G Fund support.

125. Similar to the approach taken in the CAF Phase II auction and adopted for the Rural Digital Opportunity Fund, the Commission also proposes that the Wireline Competition Bureau waive the deadline where it determines that a winning bidder has demonstrated good faith efforts to obtain its ETC designation(s), but the proceeding has not been completed by the deadline. The Commission proposes that good faith would be presumed if the winning bidder filed its ETC application with the relevant authority within 30 days after the release of the public notice announcing winning bidders.

126. Additionally, the Commission proposes to forbear from the statutory requirement that the ETC service area of a 5G Fund winning bidder conform to the service area of the rural telephone

company serving the same area. For Mobility Fund Phase I, the Commission forbore from requiring that the service areas of an ETC conform to the service area of any rural telephone company serving the same area, pursuant to section 214(e)(5) of the Act and § 54.207(b) of the Commission's rules. The Commission approved forbearance on the same terms for CAF Phase II and the Rural Digital Opportunity Fund. Consistent with the approach taken in Mobility Fund Phase I, CAF Phase II, and the Rural Digital Opportunity Fund, the Commission proposes that for those entities that obtain ETC designations as a result of being selected as winning bidders for 5G Fund support, the Commission would forbear from applying section 214(e)(5) of the Act and § 54.207(b) of the Commission's rules. The Commission anticipates that forbearing from the service area conformance requirement would eliminate the need for redefinition of any rural telephone company service areas in the context of a 5G Fund auction.

127. The Commission seeks comment on its proposals regarding ETC designations and forbearance from the service area conformance requirement. Commenters should address the three statutory requirements for any such forbearance.

2. Spectrum Access

128. The Commission proposes requiring that an applicant seeking to participate in a 5G Fund auction have access to spectrum in an area that enables it to satisfy the applicable performance requirements in order to receive 5G Fund support for that area. As more fully explained in the Commission's proposed pre-auction short-form application requirements, the Commission would require an applicant to describe its access to spectrum, and to certify that that the description is accurate, that it has access to spectrum in the area(s) in which it intends to bid, that it has such access to spectrum at the time it applies to participate in competitive bidding and at the time it applies for support, and that it would retain its access to the spectrum through the applicable term of support adopted by the Commission for the 5G Fund. The Commission seeks comment on this proposal.

3. Financial and Technical Capability

129. As it has required in other universal service proceedings, the Commission proposes requiring an entity to certify that it is financially and technically qualified to provide the services supported by the 5G Fund within the specified timeframe in the geographic areas for which it sought support. Requiring this certification is a reasonable protection for the auction process and to safeguard the award of universal service funds. As more fully explained in its proposed application requirements, the Commission proposes requiring an applicant to certify as to its financial and technical qualifications in both its pre-auction short-form application and its post-auction long-form application. The Commission seeks comment on this proposal.

4. Encouraging Participation

130. In order to encourage participation in a 5G Fund auction by the widest possible range of entities, the Commission proposes to permit all qualified applicants to participate in a 5G Fund auction. The Commission's commitment to fiscal responsibility requires that it distribute the Commission's finite budget to the provider that submits the superior, most cost-effective bid in a 5G Fund auction. The Commission did not prohibit any particular class of parties from participating in Mobility Fund Phase I based on size or other concerns or from seeking Mobility Fund Phase I support based solely on a party's past decision to relinquish universal service support provided on another basis. In order to avoid potentially limiting the Commission's ability to close the 5G coverage gap, it proposes to follow the same approach here. The Commission expects that its general auction rules and procedures would provide the basis for an auction process that would promote the Commission's objectives for the 5G Fund and provide a fair opportunity for all serious, interested parties to participate. The Commission seeks comment on this proposal.

5. Transaction Conditions

131. With respect to the T-Mobile-Sprint transaction, the Commission notes that it required certain commitments as conditions to its approval of the transaction. In particular, certain deployment

commitments were required nationwide, and also in rural areas. Specifically, T-Mobile pledged to cover 85 percent of the United States' rural population with 5G service within three years of the consummation of the transaction, and 90 percent within six years. T-Mobile further committed that, within three years, two-thirds of the rural population would have access to 5G download speeds of at least 50 Mbps, while over half (55 percent) would have access to 5G download speeds of at least 100 Mbps. Within six years of the merger closing date, T-Mobile pledged that 5G download speeds of at least 50 Mbps would be available to 90 percent of the rural population, while two-thirds of the rural population would be able to receive 5G service with download speeds of at least 100 Mbps.

132. The Commission tentatively concludes that T-Mobile should not be permitted to use any eligible areas for which it might win 5G Fund support to fulfill its transaction-specific rural commitments. The Commission seeks comment on two approaches to implement this tentative conclusion. First, because T-Mobile has transaction commitments to cover a certain percentage of population rather than specific areas, the Commission seeks comment on allowing T-Mobile to make pre-auction binding commitments to deploy 5G services in eligible areas within the adopted deployment milestones for the 5G Fund without receiving 5G Fund support and otherwise prohibiting T-Mobile from participating in the bidding process. Would allowing T-Mobile to "win" an eligible area before the 5G Fund auction for \$0 align with the Commission's goal of directing limited universal service funds to areas that would not otherwise see deployment of 5G networks? If the Commission were to allow this, are there any restrictions on where T-Mobile should be able to make such commitments?

133. Second, the Commission seeks comment on permitting T-Mobile to identify areas before the auction where it intends to deploy 5G service and removing these areas from the list of areas eligible to win support in the auction. If the Commission were to allow T-Mobile to identify such areas, the Commission seeks comment on how to ensure that T-Mobile deployed in these areas, including enforcement mechanisms. The Commission also seeks comment on whether there should be

restrictions on which areas T-Mobile may identify, and, if restrictions should be adopted, the Commission seeks comment on the specifics of these restrictions.

134. The Commission seeks comment on any other alternatives to address the interaction between the T-Mobile merger conditions and the Commission's 5G Fund objectives, and asks commenters to provide specific implementation ideas to support any alternatives they propose.

135. Do other carriers have enforceable commitments to deploy 5G? If so, what tools does the Commission have to enforce such commitments and ensure that they are met? Should these carriers be allowed, similar to T-Mobile, to identify these areas to remove them from the auction? The Commission seeks comment on these questions and any alternative mechanisms to address planned 5G deployment that would ensure that the Commission's limited funds are most efficiently targeted to the areas most in need of support. Regarding potential future transactions, the Commission similarly tentatively concludes that no party may meet any 5G deployment merger conditions adopted in any other transactions with 5G Fund support. The Commission seeks comment on using similar mechanisms as discussed above for T-Mobile and any alternatives to align merger commitments in any potential future transactions with the Commission's 5G Fund objectives. The Commission seeks comment on these proposals and any alternatives to best take into account existing and future transaction conditions in its consideration of awarding 5G Fund support.

6. Inter-Relationship with Other Universal Service Mechanisms and Obligations

136. The Commission proposes to allow recipients of other high-cost universal service support to participate in a 5G Fund auction. While the Commission does not anticipate that it would prohibit applicants from participating in a 5G Fund auction merely because they have won support through other universal service mechanisms, the Commission notes that the goals of 5G Fund are to help ensure the availability of *mobile* voice and broadband services across rural areas of the country. The Commission therefore proposes to prohibit a 5G Fund support recipient from using 5G Fund support to satisfy any pre-existing high-cost deployment obligations to fixed locations, to prohibit a recipient of

other high-cost support from using that support to satisfy its 5G Fund deployment obligations. The Commission seeks comment on this proposal.

D. Application Process

137. The Commission proposes to use a two-stage application filing process for the 5G Fund, consisting of a pre-auction short-form application and a post-auction long-form application. Under this proposal, the Commission would require an entity interested in participating in a 5G Fund auction to file a short-form application to establish its qualifications to participate in the auction, relying primarily on the applicant's disclosures as to identity, ownership, and agreements, as well as a description of its access to spectrum and various applicant certifications. After the short-form application deadline, Commission staff would conduct an initial review of the short-form applications to determine whether applicants have provided the necessary information required at the short-form stage to be qualified to participate in the auction. Following this initial review, applicants whose short-form applications are deemed incomplete would be given a limited opportunity to cure defects and to resubmit corrected applications. Only minor modifications to an applicant's short-form application would be permitted. Once Commission staff's final review is complete, a public notice would be released indicating which applicants are deemed qualified to bid in the auction.

138. After the close of the auction, the Commission would require a winning bidder to submit a long-form application with more detailed information about its qualifications, funding, and the network it intends to use to meet its public interest obligations and performance requirements, to allow Commission staff to conduct a more extensive review of the winning bidder's qualifications prior to being authorized to receive 5G Fund support. As with the short-form application, Commission staff would conduct a review of all timely filed long-form applications, afford applicants a limited opportunity to make minor modifications to amend their applications or cure defects, and to resubmit corrected applications. Once Commission staff completes a final review of the long-form applications, a public

notice would be released identifying each winning bidder that may be authorized to receive 5G Fund support. The Commission seeks comment on its proposal, and on any alternative approaches.

139. The Commission also seeks comment on the information it proposes to collect from each auction applicant in its short-form application and from each winning bidder in its long-form application. Consistent with its past practices, the Commission proposes requiring an applicant to provide basic information in its short-form application to enable the Commission to review and assess whether the applicant is qualified to participate in the auction. The Commission also proposes and seeks comment on requirements for the long-form application process pursuant to which winning bidders would demonstrate that they are legally, technically and financially qualified to receive support.

1. Short-Form Application Requirements

140. *Part 1, Subpart AA Rules for Competitive Bidding for Universal Service Support.* The Commission proposes that its existing Part 1, Subpart AA universal service competitive bidding rules should apply to an applicant seeking to participate in competitive bidding process for 5G Fund support so that such applicants would be required to: (1) provide information that would establish their identity, including disclosing parties with ownership interests and any agreements the applicants may have relating to the support to be sought through the competitive bidding process, (2) identify its authorized bidders, (3) make various universal service support specific certifications, (4) provide any additional information that may be required by the Commission in order to evaluate an applicant's qualifications to participate in the competitive bidding process, and (5) comply with the rule prohibiting certain communications during the competitive bidding process.

141. The Commission also proposes the following revisions to its Part 1, Subpart AA rules to codify policies and procedures applicable to the auction application process that have been adopted for CAF Phase II and the Rural Digital Opportunity Fund, better align provisions in Part 1, Subpart AA with like provisions in the Commission's Part 1, Subpart Q spectrum auction rules, and make other updates for consistency, clarification, and other purposes. The Commission seeks comment on these proposals.

142. *Ownership Disclosures.* Section 1.21001(b)(1) of the Commission’s rules requires an applicant to disclose in its application the identity of the applicant, including information regarding parties that have an ownership or other interest in the applicant. For Mobility Fund Phase I, CAF Phase II, and the Rural Digital Opportunity Fund, the Commission adopted separate rules specifying that the type of ownership information to be provided by applicants is the information required by § 1.2112(a) of the Commission’s rules. To simplify the ownership disclosure requirements for applicants, the Commission proposes to revise § 1.21001(b)(1) to specify that the type of ownership information to be provided by applicants is the information set forth in § 1.2112(a).

143. *Authorized Bidders.* The Commission’s spectrum auction rules prohibit the same individual from serving as an authorized bidder for more than one applicant in an auction. This prohibition ensures that an individual is not in a position to be privy to bidding strategies of more than one entity in a spectrum auction, and therefore not a conduit—intentional or unintentional—for bidding information between auction applicants. The same concerns that prompted the Commission to adopt this prohibition in spectrum auctions exist in the universal service auction context. Therefore, to align with the Commission’s spectrum auction rules and help guard against potential violations of the prohibited communications rule, the Commission proposes to revise § 1.21001(b)(2) of its rules to prohibit the same individual from serving as an authorized bidder for more than one applicant in a universal service auction.

144. *Agreement Disclosures; Certification Concerning Agreement Disclosures.* Section 1.21001(b)(3) of the Commission’s rules requires applicants to identify all real parties in interest to any agreements relating to the participation of the applicant in the competitive bidding. Section 1.21001(b)(4) of the Commission’s rules requires an applicant to certify that its application discloses all real parties in interest to any agreements involving the applicant’s participation in the competitive bidding. To better align the agreement disclosure requirement and associated certification for universal service auctions with the agreement disclosure requirement in the Commission’s spectrum auction rules

and with the procedures adopted for the CAF Phase II auction and the Rural Digital Opportunity Fund, the Commission proposes to revise § 1.21001(b)(3) to require an applicant to provide a brief description of each agreement it discloses and propose to revise § 1.21001(b)(4) to require an applicant to certify that it has provided in its application a brief description of, and identified each party to, any partnerships, joint ventures, consortia or other agreements, arrangements or understandings of any kind relating to the applicant's participation in the competitive bidding and the support being sought.

145. *Certification Concerning Auction Defaults.* Section 1.21001(b)(7) of the Commission's rules requires an applicant to certify that it will make any payment that may be required pursuant to § 1.21004 in the event of an auction default. To confirm an applicant's understanding that it will be deemed in default and thus liable for a payment, the Commission proposes to revise § 1.21001(b)(7) to also require an applicant to acknowledge, as part of making this certification and as a condition of participating in the auction, that it will be deemed in default and subject to either a default payment or a forfeiture in the event of an auction default.

146. *Due Diligence Certification.* Consistent with the requirements adopted for the CAF Phase II auction and the Rural Digital Opportunity Fund, the Commission proposes requiring an applicant to acknowledge through a certification that it has sole responsibility for investigating and evaluating all technical and marketplace factors that may have a bearing on the level of support it submits as a bid, and that if the applicant wins support, it will be able to build and operate facilities in accordance with the obligations applicable to the type of support it wins and the Commission's rules generally. This proposed certification will help ensure that each applicant acknowledges and accepts responsibility for its bids and any forfeitures imposed in the event of an auction default, and that the applicant will not attempt to place responsibility for the consequences of its bidding activity on either the Commission or third parties.

147. *Limit on Filing Applications.* Consistent with the Commission’s spectrum auction rules prohibiting the filing of more than one application by the same entity or by commonly controlled entities in a single auction and with the proposals in the *Auction 904 Comment Public Notice*, 85 FR 15092 (Mar. 17, 2020), the Commission proposes prohibiting the filing of more than one application by the same entity or by commonly controlled entities in a universal service auction under any circumstances. The Commission also proposes definitions for the terms “controlling interest,” “consortium,” and “joint venture,” which would be used to identify commonly controlled entities for purposes of this prohibition and for purposes of an applicant making any required auction application certifications. As in its spectrum auctions, the Commission proposes that in the case of a consortium, each member of the consortium would be considered to have a controlling interest in the consortium filing an application for an auction and thus a consortium member would not be able to separately file its own application to participate in that auction. Consistent with its spectrum auction rules and with the proposals in the *Auction 904 Comment Public Notice*, the Commission proposes revising § 1.21001(d) of its rules to specify that if an entity submits multiple applications in a single auction, or if entities that are commonly controlled by the same individual or same set of individuals submit more than one application in a single auction, only one of such applications may be found to be complete when reviewed for completeness and compliance with the Commission’s rules. In the Commission’s experience in the spectrum auction context, this has helped to minimize unnecessary burdens on Commission resources by eliminating the need to process duplicative, repetitious, or conflicting applications.

148. *Certification Concerning Non-Controlling Interests.* Although the Commission proposes to prohibit the filing of more than one application by commonly controlled entities in a single auction, it recognizes that in some circumstances, entities may have non-controlling interests in other entities and both entities may wish to bid in an auction. Insofar as there is no overlap between the employees in both entities that leads to the sharing of bidding information, such an arrangement may not implicate

our concerns over joint bidding among separate applicants in an auction. However, such an arrangement could allow for the non-controlling interest or shared employee to act as a conduit for communication of bidding information unless the applicants establish internal controls to ensure that bidding information would not flow between them. To address this possibility and ensure that such arrangements do not serve or appear to be conduits for information, consistent with the Commission's spectrum auction rules, the Commission proposes requiring an applicant that has a non-controlling interest with respect to more than one application in a single auction to certify that it is not, and will not be, privy to, or involved in, in any way, the bids or bidding strategy of more than one auction applicant and that it has established internal control procedures to preclude any person acting on behalf of the applicant from possessing information about the bids or bidding strategies of more than one applicant or communicating such information with respect to either applicant to another person acting on behalf of and possessing such information regarding another applicant.

149. *Prohibition on Joint Bidding Arrangements; Prohibited Communications Rule.* In view of the Commission's proposal to prohibit commonly controlled entities from filing more than one application in a single auction, no pro-competitive basis for permitting joint bidding arrangements between or among auction applicants (including any party that controls or is controlled by an applicant) is readily apparent. Conversely, joint bidding arrangements between or among such entities enhance the risk of undesirable strategic bidding during auctions. Therefore, consistent with the Commission's practice in spectrum auctions and with the proposals in the *Auction 904 Comment Public Notice*, the Commission proposes to revise § 1.21002(b) of its rules to prohibit applicants from entering into joint bidding arrangements relating to their participation in a universal service auction and propose to require each applicant to certify in its auction application that it has not entered into any explicit or implicit agreements, arrangements, or understandings of any kind related to the support to be sought other than those disclosed in its application. In connection with its proposal to prohibit joint bidding

arrangements, the Commission proposes to revise the definition of “applicant” in § 1.21002(a) and to define “bids or bidding strategies.”

150. The Commission also proposes other revisions to § 1.21002 to better align with its spectrum auction rules and the proposals made herein. The Commission proposes requiring an applicant that has a non-controlling interest with respect to more than one application to implement internal controls that preclude any person acting on behalf of the applicant from possessing information about the bids or bidding strategies of more than one applicant or communicating such information with respect to either applicant to another person acting on behalf of and possessing such information regarding another applicant. The Commission also proposes requiring an applicant to modify its application for an auction to reflect any changes in ownership or in membership of a consortium or a joint venture or agreements or understandings related to the support being sought.

151. Additionally, the Commission proposes clarification and accuracy revisions to § 1.21002 concerning the procedure for reporting a prohibited communication.

152. *Additional Application Requirements Specific to 5G Fund Auction Applicants.* In addition to providing the information required in Part 1, Subpart AA of the Commission’s rules, consistent with the short-form requirements for Commission spectrum and universal service support auctions, the Commission proposes requiring applicants to also provide the following 5G Fund specific information in their short-form applications.

153. *Technical and Financial Qualifications Certification.* The Commission proposes to require a 5G Fund auction applicant to certify that it is technically and financially capable of meeting the 5G Fund public interest obligations and performance requirements in each area for which it seeks support. The Commission required Mobility Fund Phase I and CAF Phase II auction applicants to certify in their short-form applications that they were technically and financially capable of meeting the relevant public interest obligations in each area for which they sought support, and has adopted a requirement for

Rural Digital Opportunity Fund auction applicants to make this same certification. The Commission seeks comment on this proposal.

154. *Status as an Eligible Telecommunications Carrier.* Although it proposes herein not to require an applicant to obtain an ETC designation prior to applying to participate in a 5G Fund auction, the Commission proposes requiring each applicant to disclose in its short-form application its status as an ETC in any area for which it will seek 5G Fund support or as an entity that will become an ETC in any such area after if it is a winning bidder for 5G Fund support, and to certify that its disclosure is accurate. The Commission required CAF Phase II auction applicants to make the same disclosure and certification and adopted a requirement for Rural Digital Opportunity Fund auction applicants to do so as well. The Commission also proposes to require an applicant to disclose in the short-form application any study area codes (SACs) associated with an applicant (or its parent company) if the applicant indicates it is currently an ETC. The Commission seeks comment on this proposal.

155. *Access to Spectrum.* In connection with the Commission's proposed eligibility requirements relating to spectrum access, it proposes requiring an applicant to describe the spectrum access it plans to use to meet its 5G Fund public interest obligations and performance requirements in the particular area(s) for which it intends to bid, and to certify that the description is accurate and that the applicant will retain its access to the spectrum for at least 10 years from the date support is authorized. The Commission would require an applicant to: (1) disclose whether it currently holds or leases the spectrum, (2) identify the license applicable to the spectrum to be accessed, the type of service covered by the license, the particular frequency band(s), the call sign, and any necessary renewal expectancy, and (3) indicate whether such spectrum access is contingent on obtaining support in a 5G Fund auction. Because an applicant must have access to spectrum in all areas for which it will bid for support, the Commission proposes requiring that, as part of its spectrum access certification, an applicant also certify that it has access to spectrum in the area(s) in which it intends to bid in each state and/or Tribal land area selected in its application (i.e., certify that the geographic scope of the

applicant's access covers the entire area for which the applicant intends to bid). Specifically, the Commission proposes requiring an applicant to make the following certification in its short-form application under penalty of perjury:

The applicant has access to spectrum in each area in which it intends to bid for support within each state and/or Tribal land area selected in this application, the applicant will retain such access for at least ten (10) years after the date on which it is authorized to receive support, and the description of spectrum access in the area(s) for which the applicant intends to bid for support provided in this application is accurate.

The Commission would also require an applicant to have obtained any necessary approvals from the Commission for the required spectrum access prior to submitting a 5G Fund auction application for the described spectrum access to be considered sufficient. The Commission seeks comment on this proposal.

156. Given that 5G Fund support would be awarded to advance the deployment of 5G service, the spectrum an applicant plans to use to meet its 5G Fund public interest obligations and performance requirements must be capable of supporting 5G service as it is defined in the performance requirements the Commission proposes to adopt for 5G Fund support. The Commission therefore proposes that entities seeking to receive support from the 5G Fund have access to spectrum and sufficient bandwidth (at a minimum, 10 megahertz x 10 megahertz using frequency division duplex (FDD) or 20 megahertz using time division duplex (TDD)) capable of supporting 5G services. The Commission notes that 3GPP, Release 16 has finalized various frequency bands for North America that appear to be capable of supporting 5G. The Commission seeks comment on whether there is other spectrum (licensed or unlicensed) that it should also consider appropriate to support 5G services. Commenting parties should specifically describe how such other spectrum would support reliable, proven, commercially viable 5G service—e.g., how the commenting party is currently using that

spectrum to provide 5G mobile broadband service and/or how that spectrum is currently being used in the marketplace to provide 5G based mobile broadband service.

157. *Technical and Financial Qualifications.* Similar to the approach taken for the CAF Phase II auction and adopted for the Rural Digital Opportunity Fund, the Commission proposes establishing two pathways for an applicant to demonstrate its technical and financial qualifications to participate in a 5G Fund auction. The Commission would first require an applicant to indicate in its application whether it has been providing mobile wireless voice and/or mobile wireless broadband service for at least three years prior to the short-form application deadline (or that it is a wholly-owned subsidiary of an entity that has been providing such service for at least three years) to determine which pathway the applicant would need to take.

158. *Applicants That Have Been Providing Mobile Wireless Service for at Least Three Years.* If an applicant indicates that it has been providing mobile wireless voice and/or mobile wireless broadband service to end user subscribers for at least three years prior to the short-form application deadline (or is a wholly owned subsidiary of an entity that has been providing such service for at least three years), the Commission would require the applicant to (1) specify the number of years it (or its parent company, if it is a wholly owned subsidiary) has been providing such service, (2) certify that it (or its parent company, if it is a wholly owned subsidiary) has filed FCC Form 477s as required during that time period, and (3) provide any FCC Registration Numbers (FRNs) that the applicant or its parent company (and in the case of a holding company applicant, its operating companies) have used to submit mobile wireless voice and/or mobile wireless broadband data with FCC Form 477 data for the past three years. Data regarding where a service provider offers mobile wireless voice and/or mobile wireless broadband service, the number of mobile wireless voice and/or mobile wireless broadband subscribers it has, and the mobile wireless broadband speeds it offers would provide insight into an applicant's experience in providing such service and could help Commission staff determine whether an applicant can reasonably be expected to be capable of meeting the 5G Fund public interest obligations and

performance requirements. The Commission expects that it would generally be sufficient to review FCC Form 477 data from only the past three years because those data would reflect the services that the applicant is currently offering or recently offered and would illustrate the extent to which an applicant was able to scale its network in the recent past. The Commission seeks comment on this proposal. The Commission also seeks comment on whether the applicant should be required to submit other information to enable the Commission to assess its technical and financial qualifications.

159. *Applicants That Have Been Providing Mobile Wireless Service for Fewer Than Three Years, or Not At All.* If an applicant indicates that it has not been providing mobile wireless voice and/or mobile wireless broadband service for at least three years prior to the short-form application deadline (or is not a wholly owned subsidiary of an entity that has been providing such service for at least three years), the Commission proposes to collect certain high-level operational history, technical, and financial information from the applicant to enable Commission staff to determine whether the applicant can reasonably be expected to be capable of meeting the 5G Fund public interest obligations and performance requirements.

160. The Commission proposes requiring an applicant that has not been providing mobile wireless voice and/or mobile wireless broadband service to end user subscribers for at least three years to submit information concerning its operational history and a preliminary project description. The information an applicant would be required to provide concerning its operational history would provide an opportunity for an applicant that is currently providing mobile wireless voice and/or mobile wireless broadband service to end user subscribers but for fewer than three years to describe its experience. The technical information an applicant would provide in a preliminary project description would be designed to obtain information about the network to be built or upgraded by the applicant and the technologies the applicant plans to use to provide mobile wireless broadband service in order to confirm that the applicant has developed a preliminary network design plan and/or business case for meeting its 5G Fund public interest obligations and performance requirements. Because the Commission expects

that applicants will already have started planning to deploy the required mobile wireless voice and mobile wireless broadband services upon authorization of 5G Fund support, the Commission does not anticipate that it would be unduly burdensome to respond to these questions. Consistent with the procedures adopted for the CAF Phase II auction, the Commission proposes to treat the information submitted by an applicant concerning its operational history and its preliminary project description, along with any associated supporting information, as confidential, and would withhold such information from routine public inspection both during and after a 5G Fund auction.

161. The Commission also proposes to require an applicant that has not been providing mobile wireless voice or mobile wireless broadband service for at least three years to submit the following financial information: (1) a letter of interest from a qualified bank stating that the bank would provide a letter of credit to the applicant if the applicant becomes a winning bidder for bids of a certain dollar magnitude, as well as the maximum dollar amount for which the bank would be willing to issue a letter of credit to the applicant, and (2) a statement that the bank would be willing to issue a letter of credit that is substantially in the same form as set forth in the model letter of credit provided in Appendix D to the NPRM. The Commission proposes requiring that the bank issuing the letter of interest meet the acceptability requirements proposed in the NPRM for banks issuing letters of credit to 5G Fund winning bidders. The Commission seeks comment on this proposal, and on whether it should provide an alternative (e.g., submission of audited financial statements) in the event an applicant is unable to obtain a letter of interest.

162. Requiring a potential bidder to submit evidence in its short-form application that it can meet the 5G Fund public interest obligations and performance requirements in the area(s) for which it seeks 5G Fund support will help safeguard consumers from situations where bidders unable to meet such obligations divert support from bidders that can meet them. The information the Commission proposes to collect in the short-form application from an applicant that has been providing service for fewer than three years is designed to enable Commission staff to assess that applicant's technical and

financial qualifications to bid for 5G Fund support and to meet the 5G Fund public interest obligations and performance requirements, while at the same time minimizing the burden on applicants and Commission staff. The Commission seeks comment on its proposals, and on whether it should consider collecting other information that would enable the Commission to assess an applicant's technical and financial qualifications.

163. The Commission recognizes that if it were to adopt these requirements, it would potentially be precluding interested bidders that are unable to meet these requirements from participating in an auction for 5G Fund support. Commenters proposing alternative requirements for demonstrating an applicant's technical and financial qualifications to participate in a 5G Fund auction should explain how their approach would similarly serve to further the Commission's responsibility to implement safeguards to ensure the public's funds are being provided to entities that have the requisite operational and financial qualifications and to protect consumers in rural and high-cost areas against being stranded without a service provider in the event a winning bidder or long-form applicant defaults.

164. As in any Commission auction for universal service fund support, the Commission seeks to balance the burdens on 5G Fund auction applicants of completing a short-form application with the Commission's statutory obligation to protect universal service funds, the integrity of the auction, and rural consumers. The Commission seeks comment on the information it proposes to collect concerning an applicant's technical and financial qualifications.

2. Amendments to Red Light Rule for Universal Service Auctions

165. The Commission adopted rules, including a provision referred to as the "red light rule," that implement the Commission's obligation under the Debt Collection Improvement Act of 1996, which govern the collection of debts owed to the United States, including debts owed to the Commission. Under the red light rule, applications and other requests for benefits filed by parties that have outstanding debts owed to the Commission will not be processed. Applicants seeking to participate in a universal service auction are subject to the Commission's red light rule. Pursuant to the red light rule,

unless otherwise expressly provided for, the Commission will withhold action on an application by any entity found to be delinquent in its debt to the Commission.

166. Concluding that robust participation would be critical to the success of the CAF Phase II auction, the Commission provided a limited waiver of the red light rule for any Auction 903 applicant seeking to participate in the auction that was red lighted for debt owed to the Commission at the time it timely filed its short-form application. The limited waiver adopted for the CAF Phase II auction provided a red lighted applicant seeking to participate in that auction until the close of the application resubmission filing window to pay any debt(s) associated with the red light. Under this approach, if an applicant had not resolved its red light issue(s) by the close of the initial application filing window, its application would be deemed incomplete, and if the applicant had not resolved its red light issue(s) by the close of the application resubmission window, Commission staff would immediately cease all processing of the applicant's short-form application, and the applicant would be deemed not qualified to bid in the auction.

167. Because the Commission considers robust participation to be critical to the success of any universal service auction, including a 5G Fund auction, the Commission proposes to amend the Commission's rules to codify the relief granted by the CAF Phase II auction limited waiver to provide an applicant seeking to participate in any universal service auction the opportunity to resolve its red light issue(s) by the close of the application resubmission filing window. The Commission proposes no further opportunity for an applicant to cure any red light issue beyond what it describes here. The amendments the Commission proposes would not waive or otherwise affect the Commission's right or obligation to collect any debt owed to the Commission by a universal service auction applicant by any means available to the Commission, including set off, referral of debt to the United States Treasury for collection, and/or by red lighting other applications or requests filed by the affected auction applicant. The Commission seeks comment on this proposal.

3. Long-Form Application Requirements

168. The Commission proposes that its existing Part 1, Subpart AA universal service competitive bidding rules apply to 5G Fund auction winning bidders applying for 5G Fund support. Consistent with the post-auction long-form requirements for the Mobility Fund Phase I and CAF Phase II auctions, and with the requirements adopted for the Rural Digital Opportunity Fund, The Commission proposes requiring 5G Fund auction winning bidders to provide the following categories of information in their post-auction long-form applications.

169. *Ownership Disclosures.* The Commission proposes requiring a winning bidder to disclose in its long-form application ownership information as set forth in § 1.2112(a) of the Commission's rules. The Commission anticipates that wireless carriers that have participated in spectrum license auctions will already be familiar with this disclosure requirement. These companies will also have ownership disclosure reports (in the short-form application or FCC Form 602) on file with the Commission, which may simply need to be updated, minimizing the reporting burden on winning bidders. The Commission seeks comment on this proposal.

170. *Agreement Disclosures.* The Commission proposes requiring a winning bidder to provide in its long-form application any updated information regarding the agreements, arrangements, or understandings related to its 5G Fund support disclosed in its short-form application. A winning bidder may also be required to disclose in its long-form application the specific terms, conditions, and parties involved in any agreement into which it has entered and the agreement itself. The Commission seeks comment on this proposal.

171. *ETC Designation.* Consistent with the provider eligibility requirements proposed for the 5G Fund, the Commission proposes to permit a winning bidder to obtain its ETC designation after the close of the auction, provided that it submits proof of its ETC designation within 180 days after the release of the public notice identifying winning bidders. The Commission proposes requiring that a winning bidder submit appropriate documentation of its ETC designation in all the areas for which it will

receive support in its long-form application, or certify that it will do so within 180 days of the public notice identifying winning bidders. The Commission also proposes requiring a winning bidder to demonstrate that it has been designated an ETC covering each of the geographic areas for which it seeks to be authorized for support and that its ETC designation allows it to fully comply with the 5G Fund coverage requirements within the time provided to meet this requirement before 5G Fund support is authorized. The Commission seeks comment on this proposal.

172. *Financial and Technical Capability Certification.* As proposed for the short-form application, the Commission proposes that a winning bidder also be required to certify in its long-form application that it is financially and technically capable of providing the required coverage and performance levels within the specified timeframe in the geographic areas in which it won support. The Commission seeks comment on this proposal.

173. *Project Description.* The Commission proposes requiring a winning bidder to submit for its winning bids a detailed project description that describes the network to be built; identifies the proposed technology; demonstrates that the project is technically feasible; discloses the complete project budget; discusses each specific phase of the project (e.g., network design, construction, deployment, and maintenance); and includes a complete project schedule with timelines, milestones, and costs. The Commission seeks comment on this proposal.

174. *Spectrum Access.* As proposed for the short-form application, the Commission proposes requiring a winning bidder to provide in its long-form application a description of the spectrum access that will be used to meet its obligations in areas for which it is the winning bidder, including whether it currently holds or leases the spectrum, the license applicable to the spectrum to be accessed, the type of service covered by the license, the particular frequency band(s), and the call sign, and any necessary renewal expectancy. The Commission would also require the winning bidder to certify that the description is accurate, that it has access to spectrum in the area(s) for which it is applying for support,

and that it will retain such access for the entire 10-year support term. The Commission seeks comment on this proposal.

175. *Certifications as to Program Requirements.* The Commission proposes requiring a winning bidder to make various certifications in its long-form application as to program requirements. Specifically, the Commission proposes requiring a winning bidder to certify that it has the funds available for all project costs that exceed the amount of support to be received and that it will comply with all program requirements, including the public interest obligations and performance requirements adopted for the 5G Fund. The Commission also proposes requiring a winning bidder to certify that it will meet the applicable deadlines and requirements for demonstrating interim and final construction milestones adopted for the 5G Fund, and will comply with the data speed, data latency, data allowance, collocation, voice and data roaming, and reasonably comparable rate performance requirements and public interest obligations adopted for the 5G Fund. The Commission seeks comment on these proposed certifications, and on whether there are any other program related certifications it should require.

176. *Additional Information.* Similar to what the Commission is afforded under its Part 1, Subpart AA rules for competitive bidding for universal service support for short-form applications, the Commission proposes to adopt a rule that would permit the Commission to request from winning bidders in connection with its review of long-form applications such additional information as the Commission may require to determine whether an applicant should be authorized to receive 5G Fund support. The Commission seeks comment on this proposal.

4. Support Authorization Requirements and Steps

177. *Submission of letter of Credit, Opinion Letter, and Final ETC Designation.* The Commission proposes that before being authorized for support, a winning bidder must submit (1) an irrevocable standby letter of credit issued by a bank that is acceptable to the Commission in substantially the same form as set forth in the model letter of credit provided in Appendix C of the *Rural Digital Opportunity Fund Report and Order*, and that is otherwise acceptable in all respects to the

Commission, (2) a legal counsel's opinion letter stating that the funds secured by the letter of credit will not be considered to be part of the recipient's bankruptcy estate in the event of a bankruptcy proceeding under Section 541 of the Bankruptcy Code, and (3) any final ETC designation that the winning bidder may still require. These safeguards will allow the Commission to use a letter of credit to resolve a failure to repay after non-compliance. In addition, to ensure uniformity and transparency across the Commission's high-cost universal service rules, the Commission also proposes to amend its letter of credit rules for other universal service fund programs to expand the definition of branch offices of non-United States banks that are considered eligible to issue letters of credit. The Commission seeks comment on these proposals. Should the Commission also consider any other non-United States bank branch office as specifically eligible to issue a letter of credit, if the bank's branch office is accessible to the USAC and will accept a letter of credit presentation from USAC via overnight courier, in addition to in-person presentations?

178. The Commission recognizes, however, that there may be a need for greater flexibility regarding letters of credit for Tribally-owned and -controlled winning bidders, and that it may need to provide a mechanism for such entities to petition for a waiver of the letter of credit requirement if they are unable to obtain a letter of credit, as the Commission did for the Rural Broadband Experiments and CAF Phase II, and as the Commission has adopted for the Rural Digital Opportunity Fund. While the Commission expects to follow the same approach on this topic that it adopted for the Rural Digital Opportunity Fund, the Commission nonetheless invites comment on potentially providing a letter of credit waiver opportunity for Tribally-owned and -controlled winning bidders in a 5G Fund auction.

179. *Letters of Credit.* The Commission proposes to adopt here the same letter of credit rules it adopted for the Rural Digital Opportunity Fund, inclusive of guidance provided by the Wireline Competition Bureau, in coordination with the Rural Broadband Auctions Task Force and the Office of Economics and Analytics, in a recent public notice, DA 20-307 (Mar. 20, 2020), regarding the eligibility of non-United States banks to issue letters of credit. As the Commission has previously explained, requiring

all long form applicants to obtain a letter of credit is “an effective means for accomplishing [the Commission’s] role as stewards of the public’s funds” because they “permit the Commission to immediately reclaim support” from support recipients that are not meeting their auction obligations. The letter of credit requirements the Commission proposes for the 5G Fund will establish a mechanism to recover disbursed funding efficiently in the event of non-compliance and fulfill the Commission’s responsibility to protect program funds, while also reducing the costs for applicants to participate in the 5G Fund.

180. Specifically, the Commission proposes that prior to being authorized for support, a 5G Fund long-form applicant must obtain a letter of credit equal to one year of the total support it would receive. Prior to the beginning of Year Two, the Commission proposes to require a 5G Fund support recipient to obtain a letter of credit equal to eighteen months of its total support. Prior to the beginning of Year Three, the Commission proposes to require that it obtain a letter of credit equal to two years of its total support. The Commission further proposes to require that a support recipient obtain a letter of credit equal to three years of total support until such time as USAC verifies that it has met the established performance requirements for deployment of service by its initial interim service milestone, i.e., as proposed herein, to at least 40 percent of the total square kilometers associated with the eligible areas for which it is authorized to receive 5G Fund support in a state by the end of the third full calendar year following support authorization.

181. For a support recipient that misses its interim service milestone by the end of the third full calendar year following funding authorization, the Commission proposes to require it to maintain a letter of credit covering a total of three years of support until such time as USAC verifies it has met its deployment obligations. Likewise, the Commission proposes that any support recipient failing to meet two or more service milestones (that is, failing to catch up after missing a first service milestone and remaining behind the required percentage of square kilometers deployment at the next service milestone deadline) will be required to maintain a letter of credit in the amount of three years of

support and will be subject to additional non-compliance penalties as outlined below. The Commission anticipates that these letter of credit requirements would both protect federal funds from potential non-compliance and serve as an incentive to timely deployment.

182. On the other hand, for a support recipient that meets its Year Three Interim Service Milestone, the Commission proposes to allow it to reduce the amount of support covered by its letter of credit. Specifically, consistent with the rules it adopted for the Rural Digital Opportunity Fund, the Commission proposes to allow a 5G Fund support recipient to reduce the amount of its letter of credit after it meets—and USAC verifies that it has completed—its initial Year Three Interim Service Milestone. Upon verification by USAC that the support recipient has met the established performance requirements for deployment of service by its interim service milestone, i.e., as proposed herein to at least 40 percent of the total square kilometers associated with the eligible areas for which it is authorized to receive 5G Fund support in a state by the end of the third full calendar year following authorization of support, the Commission proposes to allow the recipient to reduce its letter of credit to an amount equal to one year of total support. Once a support recipient reduces its letter of credit value to one year of total support, the Commission proposes to allow it to maintain its letter of credit at that level for the remainder of the service milestones, as long as USAC verifies that the support recipient successfully and timely meets its remaining service milestone obligations.

183. Additionally, the Commission proposes to adopt an accelerated approach for a 5G Fund support recipient to reduce its letter of credit to an amount equal to only one year of total support if it meets, and USAC verifies it has met, the Optional Year Two Interim Service Milestone of providing service that meets the established 5G Fund performance requirements to at least 20 percent of the total square kilometers associated with the eligible areas for which it is authorized to receive support in a state by the end of the second full calendar year following support authorization.

184. The Commission proposes to require that a 5G Fund support recipient maintain a letter of credit until it has certified, and USAC has verified, that it has provided service that meets the

established 5G performance requirements to at least 85 percent of the total square kilometers associated with the eligible areas for which it is authorized to receive support in a state, and at least 75 percent of the total square kilometers in each eligible census tract in a state, by the Year Six Final Service Milestone at the end of the sixth full calendar year following authorization of support. Consistent with the approach adopted for CAF Phase II and the Rural Digital Opportunity Fund, the Commission also propose that 5G Fund support recipients may be subject to other if they do not comply with the public interest obligations or any other terms and conditions associated with receiving 5G Fund support, including but not limited to the Commission's existing enforcement procedures and penalties, reductions in support amounts, revocation of ETC designations, and suspension or debarment.

185. In short, the Commission proposes a letter of credit trajectory that recognizes that once support recipients have demonstrated significant and verifiable steps toward meeting their deployment obligations, they should have the opportunity to avoid some of the more costly letter of credit requirements. The Commission anticipates that accelerated and reduced letter of credit options should reduce the costs of procuring letters of credit by 5G support recipients. For instance, in keeping with the Commission's proposals, a 5G Fund support recipient that elects to deploy quickly and meets the Optional Year Two Interim Service Milestone would never need to maintain a letter of credit that covered more than 18 months' of its total support, assuming it continues to meet all of its service milestones.

186. The Commission proposes that a 5G Fund long-form applicant obtain an irrevocable stand-by letter of credit that must be issued in substantially the same form as set forth in Appendix D to the NPRM and that a long-form applicant submit a bankruptcy opinion letter from outside legal counsel prior to being authorized to begin receiving 5G Fund support. The Commission also proposes to require that the letter of credit be issued by a bank that meets the same bank eligibility requirements adopted for the Rural Digital Opportunity Fund.

187. The Commission seeks comment on these proposals, whether the phase-down approach is an appropriate balancing of the costs and benefits of the letter of credit requirement, and on whether any adjustments should be made to the proposed letter of credit rules for the 5G Fund.

188. The Commission also seeks comment on whether it should make any changes to streamline the Commission and USAC's review and administration of letters of credit. For example, the Rural Digital Opportunity Fund auction rules require a long-form applicant to submit a single letter of credit that covers all the winning bids in a state. Should 5G Fund long-form applicants be required to submit one letter of credit that covers all the winning bids in a state to reduce the number of letters of credit that USAC and the Commission must review and track throughout the build-out period? The Commission seeks comment on these issues and on whether any other adjustments are appropriate, including adjustments to timing or the process for submitting letters of credit to USAC for review.

189. Finally, the completion of prior universal service auctions, including the Mobility Fund Phase I and the CAF Phase II auctions, provide a basis for lessons learned that can inform the letter of credit requirements in the 5G Fund. The Commission observed in these prior auction processes that companies with existing lending relationships often use letters of credit in the normal course of operating their businesses and, generally, are able to maintain multiple forms of financing for varying purposes. On the other hand, the Commission also found that winning bidders complained of the high cost of obtaining and maintaining a letter of credit. The Commission therefore seeks comment on whether it should decline to require a letter of credit for the 5G Fund. Are there viable, less costly alternatives that still minimize risk to public funds?

190. *Opinion Letter.* Consistent with its requirements for past universal service fund auctions, the Commission proposes that a winning bidder must also submit with its letter(s) of credit an opinion letter from legal counsel. The Commission proposes that the opinion letter must clearly state, subject only to customary assumptions, limitations, and qualifications, that in a proceeding under the Bankruptcy Code, the bankruptcy court would not treat the letter of credit or proceeds of the letter of

credit as property of the account party's bankruptcy estate, or the bankruptcy estate of any other competitive bidding process recipient-related entity requesting issuance of the letter of credit under section 541 of the Bankruptcy Code. The Commission seeks comment on this proposal, including costs and benefits of such an opinion letter.

5. Defaults

191. The Commission proposes that a default on a winning bid before the winning bidder has been authorized to receive 5G Fund support would be considered an auction default that would subject the 5G Fund winning bidder to a forfeiture payment. The Commission further proposes that after a winning bidder has been authorized to receive support, a failure to comply with the public interest obligations or any other terms and conditions associated with receiving 5G Fund support could result in a reduction, loss, or repayment of support, and may subject the support recipient to further action, as explained herein.

192. *Forfeiture in the Event of an Auction Default.* Consistent with the approach taken for CAF Phase II and the Rural Digital Opportunity Fund, if a winning bidder is not authorized to receive 5G Fund support (e.g., the bidder fails to file or prosecute its long-form application or its long-form application is dismissed or denied), the Commission proposes that the winning bidder be deemed in default and subject to forfeitures. Similar to the approach taken in the CAF Phase II auction and adopted for the Rural Digital Opportunity Fund, the Commission proposes to subject any 5G Fund winning bidder that is liable for an auction default to a \$3,000 base forfeiture per violation, subject to an upward adjustment based on the criteria set forth in the Commission's forfeiture guidelines.

193. The Commission further proposes that a winning bidder would be subject to the \$3,000 base forfeiture for each separate violation of the Commission's rules, which the Commission would define as any form of default with respect to each geographic unit subject to a bid in order to ensure that each violation has a relationship to the area affected by the auction default, but is not unduly punitive. To ensure that any upward adjustment of the \$3,000 base forfeiture amount is not

disproportionate to the overall scope of the winning bidder's bid, the Commission proposes to limit any upward adjustment such that the total forfeiture that could be owed by a winning bidder would not exceed 15 percent of its total winning bid amount for the entire 10-year support term. Under this approach, a winning bidder deemed to be in default would be subject to a base forfeiture amount of \$3,000, which could be adjusted upward to a total forfeiture amount of 15 percent of its total winning bid amount for the entire 10-year support term for each separate violation. Notwithstanding the Commission's proposal to limit any upward adjustment, in instances where the facts of an auction default indicate that a winning bidder engaged in anticompetitive behavior, the Commission proposes that the total forfeiture that could be owed by winning bidder in such circumstances would be up to the amount associated with preservation of service in the applicable area.

194. Auction defaults undermine the stability and predictability of the auction process and impose costs on the Commission and higher support costs for the Universal Service Fund. They also hinder the disbursement of funds that could have gone to another carrier, and thereby further delay the deployment of broadband service offerings in unserved areas. Adopting a forfeiture for auction defaults and requiring auction applicants to acknowledge in their short-form applications that they will be subject to a forfeiture in the event of an auction default will impress upon entities that apply to participate in a 5G Fund auction the importance of being prepared to meet the requirements adopted for the post-auction support authorization process, and highlight the need to conduct a due diligence review to ensure that they are qualified to both participate in the 5G Fund competitive bidding process and to meet the terms and conditions for being authorized to receive support if they become winning bidders. The Commission seeks comment on this proposal.

195. *Dismissal of Long-Form Application for Failure to Prosecute.* Section 1.21004(a) of the Commission's rules requires a winning bidder in any universal service auction to submit a timely and sufficient application for universal service support associated with its winning bids and provides that a winning bidder that fails to file an application for support or that for any other reason is not authorized

to receive support has defaulted on its winning bids. However, this rule does not discuss the timing within which a winning bidder with a pending support application must respond to Commission staff requests for additional information regarding its application and become authorized for support before that winning bidder will be considered to have failed to prosecute its application. The rule also does not specify the timing or circumstances pursuant to which the Commission can take action to dismiss an application for the winning bidder's failure to prosecute and deem the winning bidder to be in default. To allow the Commission to more efficiently and effectively process pending applications for universal service support, and considering lessons learned from the Mobility Fund Phase I and CAF Phase II post-auction application processes, the Commission proposes to amend § 1.21004 of the Commission's rules to add a new rule that permits the Commission to dismiss any universal service auction winning bidder's long-form application with prejudice and deem the winning bidder to be in default if the winning bidder fails to prosecute its long-form application, fails to respond substantially within a specified time period to official correspondence or requests for additional information, or otherwise fails to comply with requirements for becoming authorized to receive universal service support. This approach will encourage winning bidders to timely and diligently prosecute their long-form applications and take the steps necessary to become authorized to receive support, and will allow the Commission to efficiently dispose of applications for a winning bidder's failure to prosecute its application or otherwise comply with the requirements for becoming authorized to receive support and in turn deem the winning bidder to be in default. The Commission seeks comment on this proposal.

196. *Post-Authorization Non-Compliance Measures.* The Commission proposes post-authorization non-compliance measures for the 5G Fund that are similar to the non-compliance measures and framework for support reductions applicable to all high-cost ETCs and the process adopted by the Commission for drawing on letters of credit for CAF Phase II and Rural Digital Opportunity Fund support recipients. Specifically, the Commission proposes to rely on the following

non-compliance tiers for failure to meet the 5G Fund performance requirements as of the deadline for each service milestone:

Non-Compliance Framework

Compliance Gap	Non-Compliance Measure
Tier 1: 5% to less than 15% required square kilometers coverage	Quarterly reporting
Tier 2: 15% to less than 25% required square kilometers coverage	Quarterly reporting + withhold 15% of monthly support
Tier 3: 25% to less than 50% required square kilometers coverage	Quarterly reporting + withhold 25% of monthly support
Tier 4: 50% or more required square kilometers coverage	Quarterly reporting + withhold 50% of monthly support for six months; after six months withhold 100% of monthly support and recover percentage of support equal to compliance gap plus 10% of support disbursed to date

197. Consistent with the non-compliance framework for CAF Phase II and the Rural Digital Opportunity Fund, the Commission proposes that a 5G Fund support recipient would have the opportunity to move tiers as it comes into compliance, and it would receive any support that has been withheld if it moves from one of the higher tiers (i.e., Tiers 2-4) to Tier 1 status (or comes into full compliance) during the service milestones. Consistent with what it adopted for the Rural Digital Opportunity Fund, the Commission proposes that non-compliance of 50 percent or more at the Year Three Interim Milestone will result in default with no additional time permitted to come back into compliance. The Commission proposes that if a support recipient misses the Year Six Final Service Milestone, it would have 12 months from the date of the Year Six Final Service Milestone deadline within which to come into full compliance. If the support recipient is not able to come into full compliance with the service deployment requirements after this grace period, but has deployed service

to at least 80 percent but less than the required 85 percent of the total eligible square kilometers in a state, the Commission proposes that the support recipient be required to pay 1.25 times the average support amount per square kilometer that it has received in the state times the number of square kilometers unserved, up to the 85 percent coverage requirement. If the support recipient has deployed service to at least 75 percent but less than 80 percent of the total eligible square kilometers in a state, the Commission proposes that the support recipient be required to pay 1.5 times the average support per square kilometer that it has received in the state times the number of eligible square kilometers unserved, up to the 85 percent coverage requirement, plus 5 percent of its total 10-year support in the state. If the support recipient has deployed service to less than 75 percent of the total eligible square kilometers in a state, the Commission proposes that the support recipient be required to pay 1.75 times the average support per square kilometer that it has received in the state times the number of eligible square kilometers unserved up to the 85 percent coverage requirement, plus 10 percent of total 10-year 5G Fund support for the state. The Commission also proposes applying the same support reduction if USAC subsequently determines in the course of a compliance review that a support recipient did not provide evidence to demonstrate that it was offering service at the required performance levels to the square kilometers required by the Year Six Final Service Milestone. These proposals are consistent with those adopted for the Rural Digital Opportunity Fund, with adjustments to account for the fact that the Commission is proposing that the Year Six Final Service milestone require service to at least 85 percent of the total eligible square kilometers in a state.

198. The Commission additionally proposes a service deployment requirement that by the Year Six Final Service Milestone, a 5G Fund support recipient must demonstrate that it provides service aligning with the adopted 5G performance requirements established by the Commission to least 75 percent of the total square kilometers within each biddable area (e.g., census block group or census tract) for which it is authorized to receive support. If the support recipient is not able to come into full compliance with this service deployment requirement after the 12 month grace period mentioned

above, the Commission proposes that USAC will recover an amount of support that is equal to 1.5 times the average amount of support per square kilometer that the support recipient had received in the eligible area times the number of square kilometers unserved within that eligible area, up to the 75 percent requirement.

199. As was adopted for the Rural Digital Opportunity Fund, the Commission proposes that USAC would be authorized to draw on the letter of credit for its full value to recover the support covered by the letter of credit in the event that a support recipient does not meet the relevant service milestones, does not come into compliance during the Year Six Final Service Milestone grace period, and does not repay the Commission the support associated with the non-compliance gap within a certain amount of time. If a support recipient is in Tier 4 status during the build-out period or has missed the final service milestone, and USAC has initiated support recovery as described above, the support recipient would have six months to pay back the support that USAC seeks to recover. The Commission proposes that if the support recipient does not repay USAC by the deadline, the Wireline Competition Bureau would issue a letter to that effect and USAC would draw on the letter of credit to recover all of the support covered by the letter of credit, with any remaining balance due being a debt owed to the Commission by the support recipient. If the Commission adopts its proposal to allow a support recipient to close its letter of credit after certification and verification of its compliance with its Year Six Final Service milestone obligations (prior to or at the end of Year Six of the support term, as it has proposed), the Commission proposes that if a support recipient is later determined to have ceased offering service at the required performance levels to the required square kilometers of eligible area in a state during the 10-year term of support, such a support recipient would be subject to additional non-compliance measures such as withholding of monthly payments and enforcement action if it does not repay the Commission within six months. The Commission further proposes that, consistent with other high-cost universal service support programs, the failure to comply with the public interest obligations or any other terms and conditions associated with receipt of 5G Fund support may subject the support

recipient to the Commission's existing enforcement procedures and penalties, reductions in support amounts, potential revocation of ETC designation, and/or suspension or debarment.

200. The Commission seeks comment on these proposals. To the extent that commenters recommend any changes to the proposed service milestones or other rules, they should also comment on whether their proposals would require any changes to these proposed non-compliance measures. Commenters should also explain how their proposals encourage support recipients to comply with the Commission's rules and accomplish the Commission's oversight responsibilities, including protecting the integrity of the Universal Service Fund.

201. Given the inherent differences in deploying networks for wireline and mobile wireless broadband services, as an alternative to employing a tiered non-compliance framework for the 5G Fund, should the Commission consider a simpler approach? Should the failure by a 5G Fund support recipient to comply with the public interest obligations or any other terms or conditions associated with receipt of 5G Fund support result in the immediate withholding of a certain percentage of the support recipient's monthly support until such time as the support recipient has come into compliance? What percentage would be appropriate? Should that amount increase over time and, if so, by what percentage? Is there a period of time after which the Commission should consider withholding of 100 percent of a support recipient's monthly support and should it seek to recover a percentage of support previously awarded? If so, what period of time and what percentage of awarded support recoupment should the Commission consider? Should this amount differ depending upon the nature of the public interest obligation or other term or condition associated with the receipt of support that the 5G Fund support recipient has failed to meet? The Commission seeks comment on this alternative or any other non-compliance framework it should consider for 5G Fund support recipients that fail to meet a public interest obligation or other term or condition associated with the receipt of 5G Fund support.

6. Competitive Bidding Mechanisms and Procedures

202. Consistent with its practice for auctions, the Commission proposes to adopt high-level auction rules for the 5G Fund and defer to the pre-auction process the determination of the final procedures for a 5G Fund auction. The Commission has found that this two stage approach to establishing competitive bidding procedures—by first defining important elements of the basic structure while later considering the details that will implement those fundamentals—gives it the flexibility needed to integrate its auction objectives and high level decisions into a workable and consistent auction process. The Commission proposes to adopt its existing Part 1, Subpart AA competitive bidding process rules for universal service support for the 5G Fund. These high-level auction rules for the competitive bidding process in auctions for universal service support set out a range of options and mechanisms that the Commission may use for such purposes. The Commission seeks comment on this proposal.

IV. Procedural Matters

203. *Initial Paperwork Reduction Act Analysis.* This NPRM contains proposed new information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirement contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. In addition to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), the Commission seeks specific comment on how it might further reduce the information collection burden for small business concerns with fewer than 25 employees.

204. *Initial Regulatory Flexibility Analysis.* As required by the Regulatory Flexibility Act of 1980, as amended (RFA), the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities from the policies and rules proposed in the NPRM. The Commission requests written public comment on the IRFA.

Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the NPRM. The Commission will send a copy of the NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA). In addition, the NPRM and IRFA (or summaries thereof) will be published in the **Federal Register**.

205. 5G mobile wireless networks promise to be the next leap in broadband technology, offering significantly increased speeds, reduced latency, and better security than 4G LTE networks can offer. 5G mobile wireless broadband service is expected to create as many as three million new jobs, generate \$275 billion in private investment, and add \$500 billion in new economic growth. The Commission anticipates that the progression to 5G service will be swift. Since late 2018, major U.S. mobile wireless carriers have lit up 5G networks covering more than 200 million Americans in aggregate. And, as part of its recently approved transaction, T-Mobile has committed to deploying 5G service to 99 percent of Americans within six years, including covering 90 percent of those living in rural America within that timeframe. The Commission is concerned, however, that even with these significant deployment commitments, some rural areas will remain where there is insufficient financial incentive for mobile wireless carriers to invest in 5G-capable networks, and those communities could be excluded from the technological and economic benefits of 5G for years to come. During this transition to 5G service, the Commission therefore reaffirms its commitment to using Universal Service Fund support to close the digital divide and to make sure that parts of rural America are not left behind.

206. Given the concerns many stakeholders raised about the accuracy of Mobility Fund Phase II 4G LTE coverage data, many of which were validated during Commission staff's investigation into carriers' maps, and in light of the changes taking place in the marketplace, it no longer makes sense to use limited universal service support to deploy 4G LTE networks. Rather, to ensure that all Americans enjoy the benefits of the most modern, advanced communications technologies offered in the marketplace no matter where they live, and to maintain American leadership in 5G, the Commission proposes to establish a 5G Fund for Rural America, which would use multi-round reverse auctions to

distribute up to \$9 billion, in two phases, over the next decade and beyond to bring voice and 5G broadband service to rural areas of our country that are unlikely to see unsubsidized deployment of 5G-capable networks. Phase I of the 5G Fund would target at least \$8 billion of support to rural areas of our country that would be unlikely to see timely deployment of voice and 5G broadband service absent high-cost support or as part of T-Mobile's transaction-related commitments. To balance the Commission's policy goal of efficiently redirecting high-cost support to the areas where it is most needed with our obligation to ensure that we have an accurate understanding of the extent of nationwide mobile wireless broadband deployment, the Commission seeks comment on two options for identifying areas that would be eligible for 5G Fund support.

207. One approach for Phase I could take immediate action to define eligible areas based on current data sources that identify areas as particularly rural, and thus in the greatest need of universal service support. In recognition of the particular challenges of ensuring that voice and 5G broadband service are deployed to areas that lack any mobile broadband service, the Commission would prioritize areas that have historically lacked 4G LTE, or even 3G, service. This would ensure that the Commission could move quickly to target universal service support to those areas least likely to receive service without support, such as those with sparse populations, rugged terrain, or other factors. Under this approach, the Commission anticipates commencing the 5G Fund Phase I auction in 2021.

208. Alternatively, the Commission could delay the 5G Fund Phase I auction until after it collects and processes improved mobile broadband coverage data through the Commission's Digital Opportunity Data Collection proceeding. Collecting these data would allow the Commission to identify with greater precision those areas of the country that remain unserved by 4G LTE service. While this option would likely result in a less expansive and a more targeted list of eligible areas and help ensure prioritization of areas that currently lack service, it would potentially delay the start of the 5G Fund Phase I auction and deployment of 5G-capable networks in those areas.

209. Phase II of the 5G Fund would follow the completion of Phase I and would target universal service support to bring wireless connectivity to harder to serve and higher cost areas, such as farms and ranches, and make at least \$1 billion available specifically aimed at deployments that would facilitate precision agriculture. By proposing to rely on a two-phased approach, as it did with the Connect America Fund and has adopted for the Rural Digital Opportunity Fund, the Commission can commence a 5G Fund Phase I auction while also ensuring that Phase II would cover harder-to-serve areas so that such areas are not left behind. Moreover, the Commission's proposal to implement this two-phased approach would allow it to build upon future recommendations from the Commission's Task Force for Reviewing the Connectivity and Technology Needs of Precision Agriculture in the United States (Precision Agriculture Task Force) to more accurately target Phase II support towards services that will meet the growing needs of America's farms and ranches.

210. Full participation in today's society requires that all American consumers, not just those living in urban areas, have access to the most current and advanced technologies and services available in the marketplace. By supporting the build out of 5G mobile broadband networks in areas that likely would otherwise go unserved, the Commission can help Americans living, working, and travelling in rural communities gain access to communication options on par with those offered in urban areas.

211. The Commission's universal service obligations demand that it keep pace with changes in the communications marketplace. Similarly, the Commission's policy goal must be to use its limited Universal Service Fund dollars in rural America to support the deployment of service using the most current and advanced technology available consistent with what is being offered to urban consumers. The Commission's proposals for the 5G Fund recognize that market realities have changed since it adopted Mobility Fund Phase II, and that supporting the provision of 4G LTE service in unserved and underserved areas will not allow the Commission to accomplish this goal. By proposing to replace the planned Mobility Fund II with the 5G Fund, the Commission seeks to direct universal service funds to support networks that are more responsive, more secure, and up to 100 times faster than today's 4G

LTE networks. The Commission reaffirms its commitment to fiscal responsibility and propose concrete performance requirements and public interest obligations to ensure that rural consumers would be adequately served by the mobile wireless carriers receiving universal service support from the 5G Fund. The Commission also proposes to amend its generally applicable competitive bidding rules for universal service support and to codify recent guidance regarding letters of credit for universal service competitive bidding mechanisms.

212. The legal basis for any action that may be taken pursuant to the NPRM is authorized pursuant to sections 4(i), 214, 254, 303(r), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 214, 254, 303(r), and 403, and §§ 1.1 and 1.412 of the Commission's rules, 47 CFR 1.1 and 1.412.

213. The RFA directs agencies to provide a description of, and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted. The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small-business concern" under the Small Business Act. A "small-business concern" is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.

214. *Small Businesses, Small Organizations, Small Governmental Jurisdictions.* The Commission's actions, over time, may affect small entities that are not easily categorized at present. The Commission therefore describes here, at the outset, three broad groups of small entities that could be directly affected herein. First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the SBA's Office of Advocacy, in general a small business is an independent business having fewer than 500 employees. These types of small businesses represent 99.9 percent of all businesses in the United States which translates to 28.8 million businesses.

215. Next, the type of small entity described as a “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”

Nationwide, as of August 2016, there were approximately 356,494 small organizations based on registration and tax data filed by nonprofits with the Internal Revenue Service (IRS).

216. Finally, the small entity described as a “small governmental jurisdiction” is defined generally as “governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.” U.S. Census Bureau data from the 2012 Census of Governments indicate that there were 90,056 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States. Of this number there were 37,132 General purpose governments (county, municipal and town or township) with populations of less than 50,000 and 12,184 Special purpose governments (independent school districts and special districts) with populations of less than 50,000. The 2012 U.S. Census Bureau data for most types of governments in the local government category show that the majority of these governments have populations of less than 50,000. Based on this data the Commission estimates that at least 49,316 local government jurisdictions fall in the category of “small governmental jurisdictions.”

217. The small entities that may be affected are Wireless Telecommunications Carriers (except Satellite) and Internet Service Providers.

218. In the NPRM, the Commission begins the process of seeking comment on rules that will apply to a 5G Fund auction. We propose to establish additional public interest obligations, performance requirements, and reporting requirements that current mobile legacy high-cost support recipients must meet in order to continue receiving high-cost support, to ensure that the most advanced mobile services are available in all areas where a carrier is currently supported by legacy high-cost support. The Commission also proposes to adopt public interest obligations and performance requirements for 5G Fund support recipients, including data speed and latency requirements, usage allowances, and collocation and voice and data roaming obligations. Like all high-cost ETCs, the Commission proposes

that 5G Fund support recipients would be required to offer voice and broadband services meeting the relevant performance requirements at rates that are reasonably comparable to what they offer in urban areas.

219. The Commission proposes to adopt a 10-year support term for 5G Fund support recipients. The Commission also proposes to adopt three interim construction milestones and a final construction milestone at which a recipient must demonstrate that it provides 5G service that aligns with any adopted performance requirements established by the Commission, and seeks comment on whether there are additional measures it could adopt that would help ensure that 5G Fund support recipients will meet their initial coverage milestone (and subsequent milestones).

220. The Commission proposes adopting certain eligibility requirements for entities that are interested in participating in a 5G Fund auction, as well as a two-step application process. The Commission proposes requiring applicants to submit a pre-auction short-form application that includes information about their ownership, any agreements relating to the support to be sought through the auction, technical and financial qualifications, current status as an ETC, access to spectrum, and an acknowledgement of their responsibility to conduct due diligence. Commission staff will review the applications to determine if applicants are qualified to bid in the auction.

221. After the auction ends, the Commission proposes requiring winning bidders to submit a post-bidding long-form application in which they will submit ownership, agreement, and spectrum access information, as well as information about their qualifications, funding, and the networks they intend to use to meet their obligations. The Commission also proposes requiring winning bidders to obtain and submit documentation of an ETC designation from the state or the Commission as relevant that covers each of the geographic areas in which they won support within 180 days after the release of the public notice announcing winning bidders. The Commission proposes that prior to being authorized to receive support, winning bidders must submit an irrevocable stand-by letter of credit that meets the Commission's requirements from an eligible bank along with a bankruptcy opinion letter. The letter of

credit would cover the support that has been disbursed and that will be disbursed in the coming year, subject to modest adjustments as support recipients substantially build out their networks, until the Commission and the Universal Service Administrative Company (USAC) verify that the support recipient has met its service milestones. Commission staff will review the long-form applications and submitted documentation to determine whether winning bidders are qualified to be authorized to receive support. The Commission proposes subjecting a 5G Fund winning bidder that defaults during the long-form application process to forfeiture.

222. The Commission also proposes requiring a 5G Fund support recipient to submit a modified, renewed, or new letter of credit annually to receive its next year's support.

223. To monitor the use of 5G Fund support to ensure that it is being used for its intended purposes, the Commission proposes to require a 5G Fund support recipient to file annual certification reports certifying its compliance with each of the 5G Fund public interest obligations and performance requirements, which would be filed in USAC's online High Cost Universal Broadband (HUBB) portal. The Commission also proposes to require a 5G Fund support recipient to file milestone reports demonstrating that it has met its interim and final milestones for deployment of 5G service that meets established performance requirements, which would be filed in USAC's HUBB portal and USAC's Performance Measurement Module data portal, and seek comment on the proposed requirements and procedures for 5G Fund recipients to certify and demonstrate compliance with the 5G Fund interim and final milestones for deployment of service. The Commission further proposes that 5G Fund support recipients collect and submit speed test data, in accordance with the guidelines outlined in the NPRM, and as developed further in the Commission's Digital Opportunity Data Collection proceeding that is considering more broadly applicable standards, and that support recipients report these data and make related certifications in their milestone reports.

224. As for other high-cost support recipients, 5G Fund support recipients would be subject to record retention and audit requirements, and to support reductions for untimely filings. The

Commission also proposes subjecting a 5G Fund support recipient that fails to meet its public interest obligations and/or performance requirements or other terms and conditions of receiving 5G Fund support to a reduction, or loss, in support, in accordance with the framework for support reductions that is applicable to all high-cost ETCs that are required to meet defined service milestones and to the process the Commission adopted for drawing on letters of credit for the Connect America Fund (CAF) Phase II auction. The Commission seeks comment on alternatives to this proposal.

225. The Commission also seeks comment on a proposed approach to incorporating a Tribal lands preference into the 5G Fund auction to address the distinct challenges of ensuring that Tribal lands are provided with 5G service.

226. The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in reaching its proposed approach, which may include (among others) the following four alternatives: “(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.”

227. The Commission seeks comment on a number of issues to ensure that small entities have the opportunity to participate in a 5G Fund auction.

228. The Commission seeks comment on a two-step application process that will allow entities interested in bidding to submit a short-form application to be qualified in the auction that the Commission found to be an appropriate but not burdensome screen to ensure participation by qualified providers, including small entities. Submission of a long-form application, which requires a more fulsome review of an applicant’s qualifications to be authorized to receive support, would only be required if an applicant becomes a winning bidder. The Commission proposes establishing two pathways for an applicant to demonstrate its technical and financial qualifications to participate in a 5G

Fund auction based on its experience providing mobile wireless voice and/or broadband service.

Entities, including small entities, that have been providing mobile wireless voice and/or broadband service for at least three years would be required to submit information concerning the number of years they have been providing service and their FCC Form 477 filings for the past three years, but would not be required to submit any other technical or financial information, while entities that have been providing such service(s) for fewer than three years (or not at all) would need to submit information concerning their operational history, a preliminary project description, and an acceptable letter of interest from an eligible bank. The Commission expects that by proposing to require experienced entities to submit less information at the short-form application stage to demonstrate their technical and financial qualifications, more entities, including small entities, would be able to participate in the auction. The Commission also seeks comment on whether it should require applicants that have been providing mobile wireless voice and/or broadband service for at least three years, which may also include small entities, to submit other information to enable the Commission to assess its technical and financial qualification.

229. The Commission expects that all entities, including small entities, would benefit from its proposal to permit all winning bidders to obtain their ETC designations after becoming winning bidders, so that they do not have to go through the ETC designation process prior to finding out if they have won support through the auction. Recognizing that some participants in the Commission's past universal service auctions, including small entities, have expressed concerns about the costs of obtaining and maintaining a letter of credit, the Commission also comments on whether there are viable alternatives that will minimize risk to public funds.

230. The Commission invites comments from all parties, including small entities and participants in its past universal service support auctions, on the public interest obligations and performance requirements, interim and final construction milestones, reporting obligations, and non-compliance measures that it proposes for the 5G Fund. The Commission seeks to learn from the

experience of small entities so that it can balance its responsibility to monitor the use of universal service funds with minimizing administrative and compliance costs and burdens on 5G Fund participants.

231. Additionally, the Commission seeks comment on its proposal to incorporate a Tribal lands preference into the 5G Fund to address the distinct challenges of ensuring that Tribal lands are provided with 5G service in order to incentivize carriers, including small entities, to bid on and serve Tribal lands.

232. More generally, the proposals and questions outlined in the NPRM are designed to ensure the Commission has a complete understanding of the costs, benefits, and potential burdens associated with the different actions and methods. The Commission expects to consider the economic impact on small entities, as identified in comments filed in response to the NPRM and this IRFA, in reaching its final conclusions and taking action in this proceeding.

233. There are no federal rules that duplicate, overlap, or conflict with the rules proposed herein.

234. *Ex Parte Rules—Permit-But-Disclose.* Pursuant to 1.1200(a) of the Commission’s rules, 47 CFR 1.1200(a), this document shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules. Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies).

235. Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter’s written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments,

memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

V. Ordering Clauses

1. Accordingly, *it is ordered* that, pursuant to the authority contained in sections 4(i), 214, 254, 303(r), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 214, 254, 303(r), and 403, and §§ 1.1 and 1.412 of the Commission's rules, 47 CFR 1.1 and 1.412, this Notice of Proposed Rulemaking *is adopted*, effective thirty (30) days after publication of the text or summary thereof in the **Federal Register**.

2. *It is further ordered* that, pursuant to the authority contained in sections 4(i), 214, 254, 303(r), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 214, 254, 303(r), and 403, and §§ 1.1 and 1.412 of the Commission's rules, 47 CFR 1.1 and 1.412, *notice is hereby given* of the proposals and tentative conclusions described in this Notice of Proposed Rulemaking.

3. *It is further ordered* that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, *shall send* a copy of the NPRM, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

List of Subjects

47 CFR Part 1

Administrative practice and procedures, Reporting and recordkeeping requirements,
Telecommunications.

47 CFR Part 54

Communications common carriers, Internet, Reporting and recordkeeping requirements,
Telecommunications.

FEDERAL COMMUNICATIONS COMMISSION.

Marlene Dortch,

Secretary.

Proposed Rules

For the reasons discussed in the preamble, the Federal Communications Commission proposes to
amend 47 CFR parts 1 and 54 to read as follows:

PART 1 – PRACTICE AND PROCEDURE

- 1. The authority citation for part 1 continues to read as follows:

Authority: 47 U.S.C. chs. 2, 5, 9, 13; 28 U.S.C. 2461, unless otherwise noted.

- 2. Amend § 1.1902 by revising paragraph (f) to read as follows:

§ 1.1902 Exceptions.

* * * * *

(f) Nothing in this subpart shall supersede or invalidate other Commission rules, such as the part 1 general competitive bidding rules (47 CFR part 1, subparts Q and AA) or the service specific competitive bidding rules, as may be amended, regarding the Commission's rights, including but not limited to the Commission's right to cancel a license or authorization, obtain judgment, or collect interest, penalties, and administrative costs.

■ 3. Amend § 1.21001 by:

- a. Revising paragraph (b);
- b. Redesignating paragraphs (c) and (d) as paragraphs (e) and (f), respectively;
- c. Adding new paragraphs (c) and (d); and
- d. Revising newly redesignated paragraph (f).

The revisions and additions read as follows:

§ 1.21001 Participation in competitive bidding for support.

* * * * *

(b) *Application contents.* Unless otherwise established by public notice, an applicant to participate in competitive bidding pursuant to this subpart shall provide the following information in an acceptable form:

- (1) The identity of the applicant, i.e., the party that seeks support, and the ownership information as set forth in § 1.2112(a);
- (2) The identities of up to three individuals authorized to make or withdraw a bid on behalf of the applicant. No person may serve as an authorized bidder for more than one auction applicant;
- (3) The identities of all real parties in interest to, and a brief description of, any agreements relating to the participation of the applicant in the competitive bidding;
- (4) Certification that the applicant has provided in its application a brief description of, and identified each party to, any partnerships, joint ventures, consortia or other agreements, arrangements or

understandings of any kind relating to the applicant's participation in the competitive bidding and the support being sought, including any agreements that address or communicate directly or indirectly bids (including specific prices), bidding strategies (including the specific areas on which to bid or not to bid), or the post-auction market structure, to which the applicant, or any party that controls as defined in paragraph (d)(1) of this section or is controlled by the applicant, is a party;

(5) Certification that the applicant (or any party that controls as defined in paragraph (d)(1) of this section or is controlled by the applicant) has not entered and will not enter into any partnerships, joint ventures, consortia or other agreements, arrangements, or understandings of any kind relating to the support to be sought that address or communicate, directly or indirectly, bidding at auction (including specific prices to be bid) or bidding strategies (including the specific areas on which to bid or not to bid for support), or post-auction market structure with any other applicant (or any party that controls or is controlled by another applicant);

(6) Certification that if the applicant has ownership or other interest disclosed with respect to more than one application in a given auction, it will implement internal controls that preclude any individual acting on behalf of the applicant as defined in § 1.21002(a) from possessing information about the bids or bidding strategies (including post-auction market structure), of more than one party submitting an application for the auction or communicating such information with respect to a party submitting an application for the auction to anyone possessing such information regarding another party submitting an application for the auction;

(7) Certification that the applicant has sole responsibility for investigating and evaluating all technical and marketplace factors that may have a bearing on the level of support it submits as a bid, and that if the applicant wins support, it will be able to build and operate facilities in accordance with the obligations applicable to the type of support it wins and the Commission's rules generally;

(8) Certification that the applicant and all applicable parties have complied with and will continue to comply with § 1.21002;

(9) Certification that the applicant is in compliance with all statutory and regulatory requirements for receiving the universal service support that the applicant seeks, or, if expressly allowed by the rules specific to a high-cost support mechanism, a certification that the applicant acknowledges that it must be in compliance with such requirements before being authorized to receive support;

(10) Certification that the applicant will be subject to a default payment or a forfeiture in the event of an auction default and that the applicant will make any payment that may be required pursuant to §1.21004;

(11) Certification that the applicant is not delinquent on any debt owed to the Commission and that it is not delinquent on any non-tax debt owed to any Federal agency as of the deadline for submitting applications to participate in competitive bidding pursuant to this subpart, or that it will cure any such delinquency prior to the end of the application resubmission period established by public notice.

(12) Certification that the individual submitting the application is authorized to do so on behalf of the applicant; and

(13) Such additional information as may be required.

(c) *Limit on filing applications.* In any auction, no individual or entity may file more than one application to participate in competitive bidding or have a controlling interest (as defined in paragraph (d)(1) of this section) in more than one application to participate in competitive bidding. In the case of a consortium, each member of the consortium shall be considered to have a controlling interest in the consortium. In the event that applications for an auction are filed by applicants with overlapping controlling interests, pursuant to paragraph (f)(3) of this section, both applications will be deemed incomplete and only one such applicant may be deemed qualified to bid.

(d) *Definitions.* For purposes of the certifications required under paragraph (b) of this section and the limit on filing applications in paragraph (c) of this section:

(1) The term *controlling interest* includes individuals or entities with positive or negative *de jure* or *de facto* control of the applicant. *De jure* control includes holding 50 percent or more of the voting stock of

a corporation or holding a general partnership interest in a partnership. Ownership interests that are held indirectly by any party through one or more intervening corporations may be determined by successive multiplication of the ownership percentages for each link in the vertical ownership chain and application of the relevant attribution benchmark to the resulting product, except that if the ownership percentage for an interest in any link in the chain meets or exceeds 50 percent or represents actual control, it may be treated as if it were a 100 percent interest. *De facto* control is determined on a case-by-case basis. Examples of *de facto* control include constituting or appointing 50 percent or more of the board of directors or management committee; having authority to appoint, promote, demote, and fire senior executives that control the day-to-day activities of the support recipient; or playing an integral role in management decisions. In the case of a consortium, each member of the consortium shall be considered to have a controlling interest in the consortium.

(2) The term *consortium* means an entity formed to apply as a single applicant to bid at auction pursuant to an agreement by two or more separate and distinct legal entities.

(3) The term *joint venture* means a legally cognizable entity formed to apply as a single applicant to bid at auction pursuant to an agreement by two or more separate and distinct legal entities.

(e) *Financial requirements for participation.* As a prerequisite to participating in competitive bidding, an applicant may be required to post a bond or place funds on deposit with the Commission in an amount based on the default payment that may be required pursuant to §1.21004. The details of and deadline for posting such a bond or making such a deposit will be announced by public notice. No interest will be paid on any funds placed on deposit.

(f) *Application processing.* (1) Any timely submitted application will be reviewed by Commission staff for completeness and compliance with the Commission's rules. No untimely applications will be reviewed or considered.

(2) Any application to participate in competitive bidding that does not identify the applicant or does not include all of the certifications required pursuant to this section is unacceptable for filing and cannot be

corrected subsequent to the applicable deadline for submitting applications. The application will be deemed incomplete and the applicant will not be found qualified to bid.

(3) If an individual or entity submits multiple applications in a single auction, or if entities that are commonly controlled by the same individual or same set of individuals submit more than one application in a single auction, then only one of such applications may be deemed complete, and the other such application(s) will be deemed incomplete, and such applicants will not be found qualified to bid.

(4) An applicant will not be permitted to participate in competitive bidding if the applicant has not provided any bond or deposit of funds required pursuant to §1.21001(e), as of the applicable deadline.

(5) The Commission will provide applicants a limited opportunity to cure defects (except for failure to sign the application and to make all required certifications) during a resubmission period established by public notice and to resubmit a corrected application. During the resubmission period for curing defects, an application may be amended or modified to cure defects identified by the Commission or to make minor amendments or modifications. After the resubmission period has ended, an application may be amended or modified to make minor changes or correct minor errors in the application. An applicant may not make major modifications to its application after the initial filing deadline. An applicant will not be permitted to participate in competitive bidding if Commission staff determines that the application requires major modifications to be made after that deadline. Major modifications include, but are not limited to, any changes in the ownership of the applicant that constitute an assignment or transfer of control, or any changes in the identity of the applicant, or any changes in the required certifications. Minor amendments include, but are not limited to, the correction of typographical errors and other minor defects not identified as major. Minor modifications may be subject to a deadline established by public notice. An application will be considered to be newly filed if it is amended by a major amendment and may not be resubmitted after applicable filing deadlines.

(6) An applicant that fails to cure the defects in their applications in a timely manner during the resubmission period as specified by public notice will have its application dismissed with no further opportunity for resubmission.

(7) An applicant that is found qualified to participate in competitive bidding shall be identified in a public notice.

(8) Applicants shall have a continuing obligation to make any amendments or modifications that are necessary to maintain the accuracy and completeness of information furnished in pending applications. Such amendments or modifications shall be made as promptly as possible, and in no case more than five business days after applicants become aware of the need to make any amendment or modification, or five business days after the reportable event occurs, whichever is later. An applicant's obligation to make such amendments or modifications to a pending application continues until they are made.

▪ 4. Revise § 1.21002 to read as follows:

§ 1.21002 Prohibition of certain communications during the competitive bidding process.

(a) *Definitions.* For purposes of this section:

(1) The term “applicant” shall include all controlling interests in the entity submitting an application to participate in a given auction, as well as all holders of partnership and other ownership interests and any stock interest amounting to 10 percent or more of the entity, or outstanding stock, or outstanding voting stock of the entity submitting the application, and all officers and directors of that entity. In the case of a consortium, each member of the consortium shall be considered to have a controlling interest in the consortium; and

(2) The term *bids* or *bidding strategies* shall include capital calls or requests for additional funds in support of bids or bidding strategies.

(b) *Certain communications prohibited.* After the deadline for submitting applications to participate, an applicant is prohibited from cooperating or collaborating with any other applicant with respect to its

own, or one another's, or any other competing applicant's bids or bidding strategies, and is prohibited from communicating with any other applicant in any manner the substance of its own, or one another's, or any other competing applicant's bids or bidding strategies, until after the post-auction deadline for winning bidders to submit applications for support.

Example: Company A is an applicant in area 1. Company B and Company C each own 10 percent of Company A. Company D is an applicant in area 1, area 2, and area 3. Company C is an applicant in area 3. Without violating the Commission's Rules, Company B can enter into a consortium arrangement with Company D or acquire an ownership interest in Company D if Company B certifies either:

(1) That it has communicated with and will communicate neither with Company A or anyone else concerning Company A's bids or bidding strategy, nor with Company C or anyone else concerning Company C's bids or bidding strategy, or

(2) That it has not communicated with and will not communicate with Company D or anyone else concerning Company D's bids or bidding strategy.

(c) Any party submitting an application for a given auction that has an ownership or other interest disclosed with respect to more than one application for an auction must implement internal controls that preclude any individual acting on behalf of the applicant as defined in paragraph (a)(1) of this section from possessing information about the bids or bidding strategies as defined in paragraph (a)(2) of this section of more than one party submitting an application for the auction or communicating such information with respect to a party submitting an application for the auction to anyone possessing such information regarding another party submitting an application for the auction. Implementation of such internal controls will not outweigh specific evidence that a prohibited communication has occurred, nor will it preclude the initiation of an investigation when warranted.

(d) An applicant must modify its application for an auction to reflect any changes in ownership or in membership of a consortium or a joint venture or agreements or understandings related to the support being sought.

(e) *Duty to report potentially prohibited communications.* An applicant that makes or receives communications that may be prohibited pursuant to paragraph (b) of this section shall report such communications to the Commission staff immediately, and in any case no later than 5 business days after the communication occurs. An applicant's obligation to make such a report continues until the report has been made.

(f) *Procedures for reporting potentially prohibited communications.* Any report required to be filed pursuant to this section shall be filed as directed in public notices detailing procedures for the bidding that was the subject of the reported communication. If no such public notice provides direction, the party making the report shall do so in writing to the Chief of the Auctions Division, Office of Economics and Analytics, by the most expeditious means available, including electronic transmission such as email.

▪ 5. Amend § 1.21004 by:

- a. Redesignating paragraphs (b) and (c) as paragraphs (c) and (d), respectively;
- b. Adding new paragraph (b); and
- c. Revising newly redesignated paragraphs (c) and (d).

The addition and revisions read as follows:

§ 1.21004 Winning bidder's obligation to apply for support.

* * * * *

(b) *Dismissal for failure to prosecute.* The Commission may dismiss a winning bidder's application with prejudice for failure of the winning bidder to prosecute, failure of the winning bidder to respond substantially within the time period specified in official correspondence or requests for additional information, or failure of the winning bidder to comply with requirements for becoming authorized to

receive support. A winning bidder whose application is dismissed for failure to prosecute pursuant to this paragraph has defaulted on its bid(s).

(c) Liability for default payment or forfeiture in the event of auction default. A winning bidder that defaults on its bid(s) is liable for either a default payment or a forfeiture, which will be calculated by a method that will be established as provided in an order or public notice prior to competitive bidding. If the default payment is determined as a percentage of the defaulted bid amount, the default payment will not exceed twenty percent of the amount of the defaulted bid amount.

(d) Additional liabilities. In addition to being liable for a default payment or a forfeiture pursuant to paragraph (c) of this section, a winning bidder that defaults on its winning bid(s) shall be subject to such measures as the Commission may provide, including but not limited to disqualification from future competitive bidding pursuant to this subpart.

PART 54 – UNIVERSAL SERVICE

- 6. The authority citation for part 54 continues to read as follows:

Authority: 47 U.S.C. 151, 154(i), 155, 201, 205, 214, 219, 220, 229, 254, 303(r), 403, 1004, and 1302, unless otherwise noted.

- 7. Amend § 54.5 by:
 - a. Revising the definition of “High-cost support”;
 - b. Adding, in alphabetical order, a definition for “Mobile competitive eligible telecommunications carrier”; and
 - c. Revising the definition of “Tribal lands”.

The revisions and addition read as follows:

§ 54.5 Terms and definitions.

* * * * *

High-cost support. “High-cost support” refers to those support mechanisms in existence as of October 1, 2011, specifically, high-cost loop support, safety net additive and safety valve provided pursuant to subpart F of part 36, local switching support pursuant to § 54.301, forward-looking support pursuant to § 54.309, interstate access support pursuant to §§ 54.800 through 54.809, and interstate common line support pursuant to §§ 54.901 through 54.904, support provided pursuant to §§ 51.915 and 51.917 of this chapter, and § 54.304, support provided to competitive eligible telecommunications carriers as set forth in § 54.307(e), Connect America Fund support provided pursuant to § 54.312, and Mobility Fund and 5G Fund support provided pursuant to subpart L of this part.

* * * * *

Mobile competitive eligible telecommunications carrier. A “mobile competitive eligible telecommunications carrier” is a carrier that meets the definition of a “competitive eligible telecommunications carrier” in this section and that provides a terrestrial-based service meeting the definition of “commercial mobile radio service” in § 51.5 of this chapter.

* * * * *

Tribal lands. For the purposes of high-cost support, “Tribal lands” include any federally recognized Indian tribe’s reservation, pueblo or colony, including former reservations in Oklahoma, Alaska Native regions established pursuant to the Alaska Native Claims Settlement Act (85 Stat. 688) and Indian Allotments, see § 54.400(e), as well as Hawaiian Home Lands – areas held in trust for native Hawaiians by the state of Hawaii, pursuant to the Hawaiian Homes Commission Act, 1920, July 9, 1921, 42 Stat 108, et seq., as amended; and any land designated as such by the Commission.

* * * * *

- 8. Amend § 54.307 by revising paragraphs (e)(5) through (7) to read as follows:

§ 54.307 Support to a competitive eligible telecommunications carrier.

* * * * *

(e) * * *

(5) *Eligibility for interim support before 5G Fund Phase I auction.* (i) A competitive eligible telecommunications carrier that receives monthly baseline support pursuant to this section and that is not a mobile competitive eligible telecommunications carrier, as that term is defined in § 54.5, shall no longer receive monthly baseline support starting the first day of the month following the effective date of the Report and Order, [[FCC XX-XXX]];

(ii) A mobile competitive eligible telecommunications carrier that receives monthly baseline support pursuant to this section for any area that is ineligible for 5G Fund Phase I support, as determined by the Office of Economics and Analytics and Wireline Competition Bureau, shall receive monthly support amounts as follows for that area:

(A) For 12 months starting the first day of the month following the effective date of the Report and Order, [[FCC XX-XXX]], or release by the Office of Economics and Analytics and Wireline Competition Bureau of a public notice announcing the final set of areas eligible for 5G Fund Phase I support, whichever is later, each competitive eligible telecommunications carrier shall receive monthly support that is two-thirds ($\frac{2}{3}$) of the level as described in paragraph (e)(2)(iii) of this section for the ineligible area.

(B) For 12 months starting the month following the period described in paragraph (e)(5)(ii)(A) of this section, each competitive eligible telecommunications carrier shall receive monthly support that is one-third ($\frac{1}{3}$) of the level as described in paragraph (e)(2)(iii) of this section for the ineligible area.

(C) Following the period described in paragraph (e)(5)(ii)(B) of this section, no competitive eligible telecommunications carrier shall receive monthly support for the ineligible area pursuant to this section.

(iii) A mobile competitive eligible telecommunications carrier that receives monthly baseline support pursuant to this section for any area that is eligible for 5G Fund support, as determined by the Office of Economics and Analytics and Wireline Competition Bureau, shall receive monthly support for that area at the same level as described in paragraph (e)(2)(iii) of this section for no more than 60 months from the first day of the month following the effective date of the Report and Order, [[FCC XX-XXX]].

(6) Eligibility for support after 5G Fund Phase I auction. (i) Notwithstanding the schedule described in paragraph (e)(5)(iii) of this section, a mobile competitive eligible telecommunications carrier that receives monthly support pursuant to paragraph (e)(5)(iii) of this section and is a winning bidder in the 5G Fund Phase I auction shall continue to receive support at the same level it was receiving support for such area at the time of the release of a public notice announcing the close of the 5G Fund Phase I auction until such time as the Office of Economics and Analytics and Wireline Competition Bureau determine whether to authorize the carrier to receive 5G Fund Phase I support.

(A) Upon the Office of Economics and Analytics and Wireline Competition Bureau's release of a public notice approving a mobile competitive eligible telecommunications carrier's application for support submitted pursuant to § 54.1014(b) and authorizing the carrier to receive 5G Fund Phase I support, the carrier shall no longer receive support at the level of monthly support pursuant to paragraph (e)(5)(iii) of this section for such area. Thereafter, the carrier shall receive monthly support in the amount of its 5G Fund Phase I winning bid pursuant to § 54.1017, provided that USAC shall adjust the amount of the carrier's support to the extent necessary to account for any difference in support the carrier received during the period between the close of the 5G Fund Phase I auction and the release of the public notice authorizing the carrier to receive 5G Fund Phase I support.

(B) A mobile competitive eligible telecommunications carrier that is a winning bidder in the 5G Fund Phase I auction but is not subsequently authorized to receive 5G Fund Phase I support shall receive monthly support as set forth in paragraph (e)(6)(iv) of this section for such area, as applicable, provided that USAC shall decrease such amounts to account for support payments received prior to the Office of Economics and Analytics and Wireline Competition Bureau's authorization determination that exceed the amount of support for such area as set forth in paragraph (e)(6)(iv) of this section, and the monthly support in the mobile competitive eligible telecommunications carrier's winning 5G Fund Phase I bid, which USAC shall treat as the carrier's monthly support for purposes of paragraph (e)(6)(iv) of this section to the extent the carrier's winning bid is below that amount.

(ii) A mobile competitive eligible telecommunications carrier that does not receive monthly support pursuant to this section and is a winning bidder in the 5G Fund Phase I auction shall receive monthly support pursuant to § 54.1017.

(iii) A mobile eligible telecommunications carrier that receives monthly support pursuant to paragraph (e)(5)(iii) of this section for an eligible area for which support is not won in the 5G Fund Phase I auction shall continue to receive support as described in paragraph (e)(5)(iii) of this section provided that it is the carrier receiving the minimum level of sustainable support for the eligible area. The “minimum level of sustainable support” is the lowest monthly support received by a mobile competitive eligible telecommunications carrier for the eligible area that has deployed the highest level of technology within the state encompassing the eligible area.

(iv) All other mobile competitive eligible telecommunications carriers that receive monthly support pursuant to paragraph (e)(5)(iii) of this section shall receive the following monthly support amounts for areas that are eligible for 5G Fund Phase I support, as determined by the Office of Economics and Analytics and Wireline Competition Bureau:

(A) For 12 months starting the first day of the month following release by the Office of Economics and Analytics and Wireline Competition Bureau of a public notice announcing the close of the 5G Fund Phase I auction, each mobile competitive eligible telecommunications carrier shall receive monthly support that is two-thirds ($2/3$) of the level as described in paragraph (e)(5)(iii) of this section for the eligible area.

(B) For 12 months starting the month following the period described in paragraph (e)(6)(iv)(A) of this section, each mobile competitive eligible telecommunications carrier shall receive monthly support that is one-third ($1/3$) of the level as described in paragraph (e)(5)(iii) of this section for the eligible area.

(C) Following the period described in paragraph (e)(6)(iv)(B) of this section, no mobile competitive eligible telecommunications carrier shall receive monthly support for the eligible area pursuant to this section.

(7) Eligibility for support after 5G Fund Phase II auction. (i) Notwithstanding the schedule described in paragraphs (e)(6)(iii) or (iv) of this section, a mobile competitive eligible telecommunications carrier that receives monthly support pursuant to paragraphs (e)(6)(iii) or (iv) of this section, as applicable, and is a winning bidder in the 5G Fund Phase II auction shall receive support at the same level it was receiving support for such area at the time of the release of a public notice announcing the close of the 5G Fund Phase II auction until such time as the Office of Economics and Analytics and Wireline Competition Bureau determine whether to authorize the carrier to receive 5G Fund Phase II support.

(A) Upon the Office of Economics and Analytics and Wireline Competition Bureau's release of a public notice approving a mobile competitive eligible telecommunications carrier's application for support submitted pursuant to § 54.1014(b) and authorizing the carrier to receive 5G Fund Phase II support, the carrier shall no longer receive support at the level of monthly support pursuant to this section for such area. Thereafter, the carrier shall receive monthly support in the amount of its 5G Fund Phase II winning

bid pursuant to § 54.1017, provided that USAC shall adjust the amount of the carrier's support to the extent necessary to account for any difference in support the carrier received during the period between the close of the 5G Fund Phase II auction and the release of the public notice authorizing the carrier to receive 5G Fund Phase II support.

(B) A mobile competitive eligible telecommunications carrier that is a winning bidder in the 5G Fund Phase II auction but is not subsequently authorized to receive 5G Fund Phase II support shall receive monthly support as set forth in paragraphs (e)(7)(iv) and (v) of this section for such area, as applicable, provided that USAC shall decrease such amounts to account for support payments received prior to the Office of Economics and Analytics and Wireline Competition Bureau's authorization determination that exceed the amount of support for such area as set forth in paragraphs (e)(7)(iv) and (v) of this section, and the monthly support in the mobile competitive eligible telecommunications carrier's winning 5G Fund bid, which USAC shall treat as the carrier's monthly support for purposes of paragraphs (e)(7)(iv) and (v) of this section to the extent the carrier's winning bid is below that amount.

(ii) A mobile competitive eligible telecommunications carrier that does not receive monthly support pursuant to this section and is a winning bidder in the 5G Fund Phase II auction shall receive monthly support pursuant to § 54.1017.

(iii) A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to paragraph (e)(6)(iii) of this section for an eligible area for which support is not won in the 5G Fund Phase II auction shall continue to receive support for that area as described in paragraph (e)(6)(iii) of this section.

(iv) A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to paragraph (e)(6)(iii) of this section for an eligible area for which support is won in the 5G Fund Phase II auction and the carrier is not the winning bidder shall receive the following monthly support amounts:

(A) For 12 months starting the first day of the month following release by the Office of Economics and Analytics and Wireline Competition Bureau of a public notice announcing the close of the 5G Fund Phase II auction, the mobile competitive eligible telecommunications carrier shall receive monthly support that is two-thirds ($2/3$) of the level as described in paragraph (e)(6)(iii) of this section for the eligible area.

(B) For 12 months starting the month following the period described in paragraph (e)(7)(iv)(A) of this section, the mobile competitive eligible telecommunications carrier shall receive monthly support that is one-third ($1/3$) of the level as described in paragraph (e)(6)(iii) of this section for the eligible area.

(C) Following the period described in paragraph (e)(7)(iv)(B) of this section, the mobile competitive eligible telecommunications carrier shall not receive monthly support for the eligible area pursuant to this section.

(v) All other mobile competitive eligible telecommunications carriers that receive monthly support pursuant to paragraph (e)(6)(iv) of this section shall continue to receive support for the eligible area as described in paragraph (e)(6)(iv) of this section.

* * * * *

■ 9. Amend § 54.313 by revising paragraph (k) to read as follows:

§ 54.313 Annual reporting requirements for high-cost recipients.

* * * * *

(k) This section does not apply to recipients that solely receive support from Phase I of the Mobility Fund.

* * * * *

■ 10. Amend § 54.315 by revising paragraph (c)(2)(iv)(B) to read as follows:

§ 54.315 Application process for Connect America Fund phase II support distributed through competitive bidding.

* * * * *

(c) * * *

(2) * * *

(iv) * * *

(B) Has a branch office:

(1) Located in the District of Columbia; or

(2) Located in New York City, New York, or such other branch office agreed to by the Commission, that will accept a letter of credit presentation from USAC via overnight courier, in addition to in-person presentations;

* * * * *

■ 11. Add § 54.322 to read as follows:

§ 54.322 Public interest obligations and performance requirements, reporting requirements, and non-compliance mechanisms for mobile legacy high-cost support recipients.

(a) *General.* A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5)(iii), (e)(6)(iii), or (e)(7)(iii) shall deploy voice and data services that meet at least the 5G-NR (New Radio) technology standards developed by the 3rd Generation Partnership Project with Release 15, or any successor release that may be adopted by the Office of Economics and Analytics and the Wireline Competition Bureau after notice and comment.

(b) *Service milestones and deadlines.* A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5)(iii), (e)(6)(iii), or (e)(7)(iii) shall deploy 5G service as specified in paragraph (a) of this section as follows:

(1) *Year two service milestone deadline.* The carrier shall deploy 5G service that meets the performance requirements specified in paragraph (c) of this section to at least 40 percent of the areas for which the carrier receives such monthly support no later than December 31 of the second full calendar year following adoption of the Report and Order, FCC XX-XXX.

(2) *Year three service milestone deadline.* The carrier shall deploy 5G service that meets the performance requirements specified in paragraph (c) of this section to at least 60 percent of the areas for which the carrier receives such monthly support no later than December 31 of the third full calendar year following adoption of the Report and Order, FCC XX-XXX.

(3) *Year four final service milestone deadline.* The carrier shall deploy 5G service that meets the performance requirements specified in paragraph (c) of this section to at least 85 percent of the areas for which the carrier receives such monthly support no later than December 31 of the fourth full calendar year following adoption of the Report and Order, FCC XX-XXX.

(c) *Performance requirements.* A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5)(iii), (e)(6)(iii), or (e)(7)(iii) shall meet the following minimum

baseline performance requirements for data speeds, data latency, and data allowances in areas that it receives support for at least one plan that it offers:

(1) Outdoor data transmission rates of 3 Mbps upload and 35 Mbps download, with at least 90 percent of the required download speed measurements not less than a threshold speed as determined by the Office of Economics and Analytics and the Wireline Competition Bureau; and

(2) Transmission latency of 100 ms or less round trip for at least 96 percent of the measurements.

(3) At least one service plan offered must include a data allowance comparable to mid-level service plans offered by nationwide carriers.

(d) *Collocation obligations.* A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5)(iii), (e)(6)(iii), or (e)(7)(iii) shall allow for reasonable collocation by other carriers of services that would meet the performance requirements specified in paragraph (b) of this section on all network infrastructure constructed with universal service funds that it owns or manages in the area for which it receives such monthly support. In addition, the mobile competitive eligible telecommunications carrier that receives such support may not enter into facilities access arrangements that restrict any party to the arrangement from allowing others to collocate on the network infrastructure.

(e) *Voice and data roaming obligations.* A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5)(iii), (e)(6)(iii), or (e)(7)(iii) shall comply with the Commission's voice and data roaming requirements that are currently in effect on networks that are built with legacy high-cost support.

(f) *Reasonably comparable rates.* A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5)(iii), (e)(6)(iii), or (e)(7)(iii) shall offer its services in

the areas for which it is authorized to receive legacy high-cost support at rates that are reasonably comparable to those rates offered in urban areas.

(g) *Initial report of current service offerings.* A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5)(iii), (e)(6)(iii), or (e)(7)(iii) shall submit an initial report describing its current service offerings in its subsidized service areas and how the monthly support it is receiving is being used in such areas no later than three months after the effective date of this rule. The party submitting the report must certify that it has been authorized to do so by the mobile competitive eligible telecommunications carrier that receives support.

(h) *Interim and final service milestone reports.* (1) A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5)(iii), (e)(6)(iii), or (e)(7)(iii) shall submit a report on or before March 1 after each of the service milestone deadlines established in paragraph (a) of this section demonstrating that it has deployed 5G service that meets the performance requirements specified in paragraph (c) of this section, which shall include the following:

(i) Electronic shapefiles sufficient to demonstrate that the recipient has met the coverage obligations;

(ii) Representative data covering the area for which support was received demonstrating mobile transmissions to and from the network that demonstrate coverage and compliance with speed and latency requirements;

(iii) Information to support the accuracy of the shapefiles which includes, at a minimum, RF network design document with detailed site and sector information along with link budgets;

(iv) Additional information as required by the Commission in a public notice;

(v) All data submitted in a service milestone report shall be in compliance with standards set forth in the applicable public notice and shall be certified by a professional engineer.

(2) All data submitted in service milestone reports shall be subject to review and verification by USAC to confirm compliance with the performance requirements set forth in paragraph (c) of this section.

(i) *Annual reports.* (1) A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5)(iii), (e)(6)(iii), or (e)(7)(iii) shall submit an annual report no later than July 1 in each year. Each such report shall include the following information:

(i) Updated information regarding the carrier's current service offerings in its subsidized service areas and how monthly support is being used to provide 5G services in these areas, and a certification that the carrier is in compliance with the public interest obligations and all of the terms and conditions associated with the continued receipt of such monthly support disbursements; and

(ii) Certification that the carrier is in compliance with the public interest obligations and all of the terms and conditions associated with the continued receipt of monthly support.

(2) A mobile competitive eligible telecommunications carrier that receives monthly support pursuant to § 54.307(e)(5)(iii), (e)(6)(iii), or (e)(7)(iii) shall supplement the information provided to USAC in any annual report within 10 business days from the onset of any reduction in the percentage of areas for which the recipient receives support being served after the filing of an initial or annual certification report or in the event of any failure to comply with any of the requirements for continued receipt of such support.

(3) The party submitting the annual report must certify that it has been authorized to do so by mobile competitive eligible telecommunications carrier that receives support.

(4) Each annual report shall be submitted solely via the USAC Administrator's online portal.

(j) *Non-compliance measures for failure to comply with performance requirements or public interest obligations.* A mobile competitive eligible telecommunications carrier that receives monthly support

pursuant to § 54.307(e)(5)(iii), (e)(6)(iii), or (e)(7)(iii) that fails to comply with the public interest obligations set forth in paragraphs (d) through (g) of this section or fails to comply with the performance requirements set forth in paragraph (c) of this section at the prescribed level by the applicable interim deadline or by the final deadline established in paragraph (b) of this section must notify the Wireline Competition Bureau and USAC within 10 business days of its non-compliance. Upon notification, the carrier will be deemed to be in default, and for monthly support received pursuant to § 54.307(e)(5)(iii), (e)(6)(iii), or (e)(7)(iii), will no longer be eligible to receive such support, will receive no further support disbursements, and will be subject to full recovery of all such support disbursed since adoption of the public interest obligations and performance requirements specified in this section. The carrier may also be subject to further action, including the Commission's existing enforcement procedures and penalties, potential revocation of ETC designation, and suspension or debarment pursuant to § 54.8.

- 12. Amend § 54.804 by revising paragraph (c)(2)(iv)(B) to read as follows:

§ 54.804 Rural Digital Opportunity Fund application process.

* * * * *

(c) * * *

(2) * * *

(iv) * * *

(B) Has a branch office:

(1) Located in the District of Columbia; or

(2) Located in New York City, New York, or such other branch office agreed to by the Commission, that will accept a letter of credit presentation from USAC via overnight courier, in addition to in-person presentations;

* * * * *

- 13. Revise the heading for subpart L and §§ 54.1011 through 54.1021 to read as follows:

Subpart L – Mobility Fund and 5G Fund

* * * * *

§ 54.1011 5G Fund.

The Commission will use competitive bidding, as provided in part 1, subpart AA, of this chapter, to determine the recipients of support available through the 5G Fund and the amount(s) of support that they may receive for specific geographic areas, subject to applicable post-auction procedures.

§ 54.1012 Geographic areas eligible for support.

- (a) 5G Fund support may be made available for census tracts identified as eligible by public notice.
- (b) Coverage units for purposes of conducting competitive bidding and disbursing support based on square kilometers will be identified by public notice for each area eligible for support.

§ 54.1013 Applicant eligibility.

- (a) An applicant shall be an Eligible Telecommunications Carrier in an area in order to receive 5G Fund support for that area. An applicant may obtain its designation as an Eligible Telecommunications Carrier after the close of a 5G Fund auction, provided that the applicant submits proof of its designation within 180 days of the public notice identifying the applicant as a winning bidder. An applicant shall not receive 5G Fund support prior to the submission of proof of its designation as an Eligible

Telecommunications Carrier. After such submission, the Eligible Telecommunications Carrier shall receive a balloon payment that will consist of the carrier's monthly 5G Fund payment amount multiplied by the number of whole months between the first day of the month after the close of the auction and the issuance of the public notice authorizing the carrier to receive 5G Fund support.

(b) An applicant must have access to spectrum in an area that enables it to satisfy the performance requirements specified in § 54.1015 in order to receive 5G Fund support for that area. The applicant shall describe its access to spectrum and certify, in a form acceptable to the Commission, that it has such access in each area in which it intends to bid for support at the time it applies to participate in competitive bidding and at the time that it applies for support, and that it will retain such access for at least ten (10) years after the date on which it is authorized to receive support.

(c) An applicant shall certify that it is financially and technically qualified to provide the services supported by the 5G Fund within the specified timeframe in each geographic area for which it seeks and is authorized to receive support.

§ 54.1014 Application process.

(a) Application to participate in competitive bidding for 5G Fund support. In addition to providing information specified in § 1.21001(b) of this chapter and any other information required by the Commission, an applicant to participate in competitive bidding for 5G Fund support shall:

- (1) Certify that the applicant is financially and technically capable of meeting the public interest obligations and performance requirements in § 54.1015 in each area for which it seeks support;
- (2) Disclose its status as an Eligible Telecommunications Carrier in any area for which it will seek support or as an entity that will file an application to become an Eligible Telecommunications Carrier in any such area after winning support in a 5G Fund auction, and certify that the disclosure is accurate;

(3) Describe the spectrum access that the applicant plans to use to meet its public interest obligations and performance requirements in areas for which it will bid for support, including whether the applicant currently holds or leases the spectrum, including any necessary renewal expectancy, and whether such spectrum access is contingent upon receiving support in a 5G Fund auction, and certify that the description is accurate, that the applicant has access to spectrum in each area for which it intends to bid for support, and that the applicant will retain such access for at least ten (10) years after the date on which it is authorized to receive 5G Fund support;

(4) Submit specified operational and financial information;

(i) Indicate whether the applicant has been providing mobile wireless voice and/or mobile wireless broadband service for at least three years prior to the short-form application deadline (or is a wholly-owned subsidiary of an entity that has been providing such service for at least three years);

(ii) If the applicant has been providing mobile wireless voice and/or mobile wireless broadband service for at least three years prior to the short-form application deadline (or is a wholly-owned subsidiary of an entity that has been providing such service for at least three years), it must:

(A) Specify the number of years it (or its parent company, if it is a wholly-owned subsidiary) has been providing such service,

(B) Certify that it (or its parent company, if it is a wholly-owned subsidiary) has filed FCC Form 477s as required during that time period, and

(C) Provide each of the FCC Registration Numbers (FRNs) that the applicant or its parent company (and in the case of a holding company applicant, its operating companies) have used to submit mobile wireless voice and/or mobile wireless broadband data with FCC Form 477 data for the past three years.

(iii) If the applicant has been providing mobile wireless voice and/or mobile wireless broadband service for fewer than three years prior to the application deadline (or is not a wholly owned subsidiary of an entity that has been providing such service for at least three years), it must:

(A) Submit information concerning its operational history and a preliminary project description as prescribed by the Commission or the Office of Economics and Analytics and the Wireline Competition Bureau in a Public Notice;

(B) Submit a letter of interest from a qualified bank that meets the qualifications set forth in § 54.1016 stating that the bank would provide a letter of credit as described in section to the applicant if the applicant becomes a winning bidder for bids of a certain dollar magnitude, as well as the maximum dollar amount for which the bank would be willing to issue a letter of credit to the applicant; and

(C) Submit a statement that the bank would be willing to issue a letter of credit that is substantially in the same form as the Commission's model letter of credit.

(5) Certify that it will be subject to a forfeiture pursuant to § 1.21004 of this chapter in the event of an auction default; and

(6) Certification that the party submitting the application is authorized to do so on behalf of the applicant.

(b) Application by winning bidders for 5G Fund support--(1) Deadline. Unless otherwise provided by public notice, winning bidders for 5G Fund support shall file an application for 5G Fund support no later than ten (10) business days after the public notice identifying them as winning bidders.

(2) Application contents. An application for 5G Fund support must contain:

(i) Identification of the party seeking the support, including ownership information as set forth in § 1.2112(a) of this chapter;

(ii) Updated information regarding the agreements, arrangements, or understandings related to 5G Fund support disclosed in the application to participate in competitive bidding for 5G Fund support. A winning bidder may also be required to disclose in its application for 5G Fund support the specific terms, conditions, and parties involved in any agreement into which it has entered and the agreement itself;

(iii) Certification that the applicant is financially and technically capable of providing the required coverage and performance levels within the specified timeframe in the geographic areas in which it won support;

(iv) Proof of the applicant's status as an Eligible Telecommunications Carrier, or a statement that the applicant will become an Eligible Telecommunications Carrier in any area for which it seeks support within 180 days of the public notice identifying them as winning bidders, and certification that the proof is accurate;

(v) A description of the spectrum access that the applicant plans to use to meet its public interest obligations and performance requirements in areas for which it is winning bidder for support, including whether the applicant currently holds or leases the spectrum, along with any necessary renewal expectancy, and certification that the description is accurate, that the winning bidder has access to spectrum in each area for which it is applying for support, and that the applicant will retain such access for the entire ten (10) year 5G Fund support term;

(vi) A detailed project description that describes the network to be built, identifies the proposed technology, demonstrates that the project is technically feasible, discloses the complete project budget, and discusses each specific phase of the project (e.g., network design, construction, deployment, and maintenance), as well as a complete project schedule, including timelines, milestones, and costs;

(vii) Certifications that the applicant has available funds for all project costs that exceed the amount of support to be received from 5G Fund and that the applicant will comply with all program requirements, including the public interest obligations and performance requirements set forth in § 54.1015;

(viii) Any guarantee of performance that the Commission may require by public notice or other proceedings, including but not limited to the letters of credit required in § 54.1016, or a written commitment from an acceptable bank, as defined in § 54.1016, to issue such a letter of credit;

(viii) Certification that the applicant will offer services in supported areas at rates that are reasonably comparable to the rates the applicant charges in urban areas;

(ix) Certification that the party submitting the application is authorized to do so on behalf of the applicant; and

(x) Such additional information as the Commission may require.

(3) *Application processing.* (i) No application will be considered unless it has been submitted in an acceptable form during the period specified by public notice. No applications submitted or demonstrations made at any other time shall be accepted or considered.

(ii) Any application that, as of the submission deadline, either does not identify the applicant seeking support as specified in the public notice announcing application procedures, or does not include required certifications, shall be denied.

(iii) An applicant may be afforded an opportunity to make minor modifications to amend its application or correct defects noted by the applicant, the Commission, the Administrator, or other parties. Minor modifications include correcting typographical errors in the application and supplying non-material information that was inadvertently omitted or was not available at the time the application was submitted.

(iv) Applications to which major modifications are made after the deadline for submitting applications shall be denied. Major modifications include, but are not limited to, any changes in the ownership of the applicant that constitute an assignment or change of control, or the identity of the applicant, or the certifications required in the application.

(v) After receipt and review of the applications, a public notice shall identify each winning bidder that may be authorized to receive 5G Fund support, after the winning bidder submits a Letter of Credit and an accompanying opinion letter as required by § 54.1016, in a form acceptable to the Commission, and any final designation as an Eligible Telecommunications Carrier that any applicant may still require. Each such winning bidder shall submit a Letter of Credit and an accompanying opinion letter as required by § 54.1016, in a form acceptable to the Commission, and any required final designation as an Eligible Telecommunications Carrier no later than ten (10) business days following the release of the public notice.

(vi) After receipt of all necessary information, a public notice will identify each winning bidder that is authorized to receive 5G Fund support.

§ 54.1015 Public interest obligations and performance requirements for 5G Fund support recipients.

(a) *General.* A 5G Fund support recipient shall deploy voice and data services that meet at least the 5G-NR (New Radio) technology standards developed by the 3rd Generation Partnership Project with Release 15, or any successor release that may be adopted by the Office of Economics and Analytics and the Wireline Competition Bureau after notice and comment.

(b) *Interim and final service milestones and deadlines.* A 5G Fund support recipient shall deploy 5G service as specified in paragraph (a) of this section as follows:

(1) *Year three interim service milestone deadline.* A support recipient shall deploy service that meets the 5G Fund performance requirements as specified in paragraph (c) of this section to at least 40 percent of the total square kilometers associated with the eligible areas for which it is authorized to receive 5G Fund support in a state no later than December 31 of the third full calendar year following authorization of support.

(2) *Year four interim service milestone deadline.* A support recipient shall deploy service that meets the 5G Fund performance requirements as specified in paragraph (c) of this section to at least 60 percent of the total square kilometers associated with the eligible areas for which it is authorized to receive 5G Fund support in a state no later than December 31 of the fourth full calendar year following authorization of support.

(3) *Year five interim service milestone deadline.* A recipient shall deploy service that meets the 5G Fund performance requirements as specified in paragraph (c) of this section to at least 80 percent of the total square kilometers associated with the eligible areas for which it is authorized to receive 5G Fund support in a state no later than December 31 of the fifth full calendar year following authorization of support.

(4) *Year six final service milestone deadline.* A support recipient shall deploy service that meets the 5G Fund performance requirements as specified in paragraph (c) of this section to at least 85 percent of the total square kilometers associated with the eligible areas for which it is authorized to receive 5G Fund support in a state no later than December 31 of the sixth full calendar year following funding authorization. In addition, a recipient shall deploy service meeting the 5G Fund performance requirements as specified in paragraph (c) of this section to at least 75 percent of the total square kilometers associated with every census tract or census block group for which it was authorized to receive 5G Fund support no later than December 31 of the sixth full calendar year following authorization of support.

(5) *Optional year two interim service milestone deadline.* A support recipient may, at its option, deploy service that meets the 5G Fund performance requirements as specified in paragraph (c) of this section to at least 20 percent of the total square kilometers associated with the eligible areas for which it is authorized to receive 5G Fund support in a state no later than December 31 of the second full calendar year following funding authorization. Meeting this optional interim service milestone would permit the support recipient, after confirmation of the service deployment by USAC, to reduce its letter of credit so that it is valued at an amount equal to one year of support as described in § 54.1016(a)(1)(v).

(c) *Performance requirements.* A recipient authorized to receive 5G Fund support shall meet the following minimum baseline performance requirements for data speeds, data latency, and data allowances in areas where it receives support:

(1) Outdoor data transmission rates of 3 Mbps upload and 35 Mbps download, with at least 90 percent of the required download speed measurements not less than a certain threshold speed that will be defined prior to a 5G Fund auction; and

(2) Transmission latency of 100 ms or less round trip for at least 96 percent of the measurements.

(3) At least one service plan offered must include a data allowance comparable to mid-level service plans offered by nationwide carriers.

(d) *Collocation obligations.* A recipient authorized to receive 5G Fund support shall allow for reasonable collocation by other carriers of services that would meet the performance requirements of the 5G Fund on all network infrastructure constructed with universal service funds that it owns or manages in the area for which it receives 5G Fund support. In addition, the recipient may not enter into facilities access arrangements that restrict any party to the arrangement from allowing others to collocate on the network infrastructure.

(e) *Voice and data roaming obligations.* A recipient authorized to receive 5G Fund support shall comply with the Commission's voice and data roaming requirements that are currently in effect on networks that are built with 5G Fund support.

(f) *Reasonably comparable rates.* A recipient authorized to receive 5G Fund support shall offer its services in the areas for which it is authorized to receive support at rates that are reasonably comparable to those rates offered in urban areas.

(g) *Liability for failure to comply with performance requirements and public interest obligations.* A support recipient that fails to comply with the performance requirements set forth in paragraph (c) of this section is subject to the non-compliance measures set forth in § 54.1020. A support recipient that fails to comply with the public interest obligations or any other terms and conditions associated with receiving 5G Fund support may be subject to action, including the Commission's existing enforcement procedures and penalties, reductions in support amounts, revocation of ETC designation, and suspension or debarment pursuant to § 54.8.

§ 54.1016 Letter of credit.

(a) Before being authorized to receive 5G Fund support, a winning bidder shall obtain an irrevocable standby letter of credit which shall be acceptable in all respects to the Commission.

(1) Each winning bidder that becomes authorized to receive 5G Fund support shall maintain the standby letter of credit in an amount equal to, at a minimum, one year of support, until the Universal Service Administrative Company has verified that the support recipient serves at least 85 percent of the eligible square kilometers for which it is authorized to receive support in a state, and at least 75 percent of the eligible square kilometers in each eligible census tract, by the Year Six Final Service Milestone.

(i) For Year One of a support recipient's support term, it must obtain a letter of credit valued at an amount equal to one year of support.

(ii) For Year Two of a support recipient's support term, it must obtain a letter of credit valued at an amount equal to eighteen months of support.

(iii) For Year Three of a support recipient's support term, it must obtain a letter of credit valued at an amount equal to two years of support.

(iv) For Year Four of a support recipient's support term, and for each year thereafter unless the support recipient is allowed to reduce it pursuant to § 54.1015(b), it must obtain a letter of credit valued at an amount equal to three years of support.

(v) A support recipient may obtain a new letter of credit or renew its existing letter of credit so that it is valued at an amount equal to one year of support once it meets either the Optional Year Two Interim Service Milestone or the Year Three Interim Service Milestone specified in § 54.1015(b). The recipient may obtain or renew this letter of credit upon verification by USAC that it has deployed service that meets the 5G Fund performance requirements and deadlines as specified in § 54.1015(b). The recipient may maintain its letter of credit at this level for the remainder of its deployment term, so long as USAC verifies that the recipient successfully and timely meets its remaining required interim and final service milestones.

(vi) A support recipient that fails to meet its required interim service milestones must obtain a new letter of credit or renew its existing letter of credit valued at an amount equal to its existing letter of credit, plus an additional year of support, up to a maximum of three years of support.

(vii) A support recipient that fails to meet two or more required interim service milestones must maintain a letter of credit valued at an amount equal to three years of support and may be subject to additional noncompliance penalties as set forth in § 54.1020.

(2) The bank issuing the letter of credit shall be acceptable to the Commission. A bank that is acceptable to the Commission is:

(i) Any United States bank:

(A) That is insured by the Federal Deposit Insurance Corporation, and

(B) That has a bank safety rating issued by Weiss of B- or better; or

(ii) CoBank, so long as it maintains assets that place it among the 100 largest United States Banks, determined on basis of total assets as of the calendar year immediately preceding the issuance of the letter of credit and it has a long-term unsecured credit rating issued by Standard & Poor's of BBB- or better (or an equivalent rating from another nationally recognized credit rating agency); or

(iii) The National Rural Utilities Cooperative Finance Corporation, so long as it maintains assets that place it among the 100 largest United States Banks, determined on basis of total assets as of the calendar year immediately preceding the issuance of the letter of credit and it has a long-term unsecured credit rating issued by Standard & Poor's of BBB- or better (or an equivalent rating from another nationally recognized credit rating agency); or

(iv) Any non-United States bank:

(A) That is among the 100 largest non-U.S. banks in the world, determined on the basis of total assets as of the end of the calendar year immediately preceding the issuance of the letter of credit (determined on a U.S. dollar equivalent basis as of such date);

(B) Has a branch office:

(1) Located in the District of Columbia; or

(2) Located in New York City, New York, or such other branch office agreed to by the Commission, that will accept a letter of credit presentation from USAC via overnight courier, in addition to in-person presentations; and

(C) Has a long-term unsecured credit rating issued by a widely recognized credit rating agency that is equivalent to a BBB- or better rating by Standard & Poor's; and

(D) Issues the letter of credit payable in United States dollars.

(b) A winning bidder for 5G Fund support shall provide with its Letter of Credit an opinion letter from legal counsel clearly stating, subject only to customary assumptions, limitations, and qualifications, that in a proceeding under Title 11 of the United States Code, 11 U.S.C. 101 et seq. (the "Bankruptcy Code"), the bankruptcy court would not treat the letter of credit or proceeds of the letter of credit as property of the winning bidder's bankruptcy estate, or the bankruptcy estate of any other bidder-related entity requesting issuance of the letter of credit, under section 541 of the Bankruptcy Code.

(c) Authorization to receive 5G Fund support is conditioned upon full and timely performance of all of the performance requirements set forth in § 54.1015(c), and any additional terms and conditions upon which the support was granted.

(1) Failure by a recipient authorized to receive 5G Fund support to comply with any of the performance requirements set forth in § 54.1015(c) will trigger reporting obligations and the withholding of support as described in § 54.1020. Failure to come into full compliance during the relevant cure period as described in § 54.1020(b)(4)(ii) or 54.1020(c) will trigger a recovery action by USAC set forth in § 54.1020(b)(4)(ii) or 54.1020(c), as applicable. If the recipient authorized to receive 5G Fund support

does not repay the requisite amount of support within six months, USAC will be entitled to draw upon the entire amount of the letter of credit and may disqualify the 5G Fund support recipient from the receipt of 5G Fund support or additional universal service support.

(2) The default will be evidenced by a letter issued by the Chief of the Wireline Competition Bureau, or its respective designees, which letter, describing the performance default and attached to a standby letter of credit draw certificate, shall be sufficient for a draw on the standby letter of credit for the entire amount of the standby letter of credit.

§ 54.1017 5G Fund support disbursements.

(a) A winning bidder of 5G Fund support will be advised by public notice whether it has been authorized to receive support.

(b) 5G Fund support will be disbursed on a monthly basis to a recipient for ten (10) years following the date on which it is authorized to receive support.

(c) If a 5G Fund support recipient fails to comply with the performance requirements of the 5G Fund, USAC shall reduce, pause, or freeze, the monthly payments to the recipient until the recipient cures the non-compliance, as provided in § 54.1020. As set forth in § 54.1015(g), if a support recipient fails to comply with the public interest obligations or any other terms and conditions associated with receiving 5G Fund support, it may be subject reductions or suspension of support amounts.

§ 54.1018 Annual reports.

(a) A 5G Fund support recipient authorized to receive 5G Fund support shall submit an annual report to USAC no later than July 1 of each year after the year in which it was authorized to receive support. Each support recipient shall certify in its annual report that it is in compliance with the public interest

obligations, performance requirements, and all of the terms and conditions associated with the receipt of 5G Fund support in order to continue receiving 5G Fund support disbursements.

(b) All support recipients shall supplement the information provided in an annual report to USAC within 10 business days from the onset of any reduction in the percentage of the total eligible square kilometers being served in a state after the filing of an annual certification report or in the event of any failure to comply with any of the 5G Fund requirements.

(c) The party submitting the annual report must certify that it has been authorized to do so by the 5G Fund support recipient.

(d) Each annual report shall be submitted solely via the USAC Administrator's online portal.

§ 54.1019 Interim service and final service milestone reports.

(a) A recipient authorized to receive 5G Fund support shall submit a report to USAC on or before March 1 after the third, fourth, fifth, and sixth service milestone deadlines established in § 54.1015(b) demonstrating that it has deployed service meeting the 5G Fund performance requirements specified in § 54.1015(c), which shall include the following:

(1) Electronic shapefiles sufficient to demonstrate that the recipient has met the coverage obligations;

(2) Representative data covering the area for which support was received demonstrating mobile transmissions to and from the network that demonstrate coverage and compliance with speed and latency requirements;

(3) Information to support the accuracy of the shapefiles which includes, at a minimum, RF network design document with detailed site and sector information along with link budgets;

(4) Additional information as required by the Commission in a public notice;

(5) All data submitted in compliance with a recipient's public interest obligations in the milestone report shall be in compliance with standards set forth in the applicable public notice and shall be certified by a professional engineer.

(b) Each service milestone report shall be submitted solely via the USAC Administrator's online portal.

(c) All data submitted in service milestone reports shall be subject to verification by USAC for compliance with the 5G Fund performance requirements specified in § 54.1015(c).

§ 54.1020 Non-compliance measures for 5G Fund support recipients.

(a) *General.* Any support recipient that has not deployed service that meets the 5G Fund performance requirements specified in § 54.1015(c) to at least 20 percent of the total square kilometers associated with the eligible areas for which it is authorized to receive support in a state by the Year Three Interim Service Milestone deadline must notify the Wireline Competition Bureau and USAC within 10 business days of its non-compliance. Upon notification, the support recipient will be deemed to be in default and will be subject to full support recovery. The provisions of paragraph (b) of this section will not be applicable to such a support recipient.

(b) *Interim service milestones.* A 5G Fund support recipient must notify the Commission, USAC, and the relevant state, U.S. Territory, or Tribal government, if applicable, within 10 business days of its non-compliance with any interim milestone. Upon notification that a support recipient has defaulted on an interim service milestone, the Wireline Competition Bureau shall issue a letter evidencing the default. For purposes of determining whether a default has occurred, the support recipient must be offering service meeting the performance requirements specified in § 54.1015(c). The issuance of this letter shall initiate reporting obligations and withholding a percentage of the 5G Fund support recipient's total monthly 5G Fund support, if applicable, starting the month after issuance of the letter:

(1) *Tier 1.* If a support recipient has a compliance gap of at least five percent but less than 15 percent of the total square kilometers associated with the eligible areas in a state for which it is to have deployed service that meets the 5G Fund performance requirements specified in § 54.1015(c) by an interim service milestone, the Wireline Competition Bureau will issue a letter to that effect. Starting three months after the issuance of this letter, a support recipient will be required to file a report with USAC every three months that identifies the eligible square kilometers to which the support recipient has newly deployed facilities capable of delivering service that meets the requisite 5G Fund performance requirements in the previous quarter. The support recipient must continue to file quarterly reports until it has reported, and USAC has verified, that it has reduced the compliance gap to less than five percent of the total square kilometers associated with the eligible areas for which it is authorized to receive support in a state by that interim service milestone and the Wireline Competition Bureau issues a letter to that effect. A support recipient that files a quarterly report late, but within seven days after the due date established by the letter issued by the Wireline Competition Bureau for filing the report, will have its 5G Fund support reduced by an amount equivalent to seven days of support. If a support recipient does not file a report within seven days after the report's due date, it will have its 5G Fund support reduced on a pro-rata daily basis equivalent to the period of non-compliance, plus the minimum seven-day reduction, until such time as the quarterly report is filed.

(2) *Tier 2.* If a support recipient has a compliance gap of at least 15 percent but less than 25 percent of the total square kilometers associated with the eligible areas in a state for which it is to have deployed service that meets the 5G Fund performance requirements specified in § 54.1015(c) by an interim service milestone, USAC will withhold 15 percent of the support recipient's monthly support for that state and the support recipient will be required to file quarterly reports with USAC. Once the support recipient has reported, and USAC has verified, that it has reduced the compliance gap to less than 15 percent of the required eligible square kilometers for that interim service milestone for that state, the

Wireline Competition Bureau will issue a letter to that effect, USAC will stop withholding support, and the support recipient will receive all of the support that had been withheld. The support recipient will then move to Tier 1 status.

(3) *Tier 3.* If a support recipient has a compliance gap of at least 25 percent but less than 50 percent of the total square kilometers associated with the eligible areas in a state for which it is to have deployed service that meets the 5G Fund performance requirements specified in § 54.1015(c) by an interim service milestone, USAC will withhold 25 percent of the support recipient's monthly support for that state and the support recipient will be required to file quarterly reports with USAC. Once the support recipient has reported, and USAC has verified, that it has reduced the compliance gap to less than 25 percent of the required eligible square kilometers for that interim service milestone for that state, the Wireline Competition Bureau will issue a letter to that effect, and the support recipient will move to Tier 2 or Tier 1 status, as applicable.

(4) *Tier 4.* If a support recipient has a compliance gap of 50 percent or more of the total square kilometers associated with the eligible areas in a state for which it is to have deployed service that meets the 5G Fund performance requirements specified in § 54.1015(c) by an interim service milestone:

(i) USAC will withhold 50 percent of the support recipient's monthly support for that state and the support recipient will then be required to file quarterly reports with USAC. As with the other tiers, as the support recipient reports, and USAC verifies, that it has lessened the extent of its non-compliance, and the Wireline Competition Bureau issues a letter to that effect, it will move through the tiers until it reaches Tier 1 (or no longer is out of compliance with the applicable interim service milestone).

(ii) If after having 50 percent of its support withheld for six months, the support recipient has not reported that it is eligible for Tier 3 status (or one of the lower tiers), USAC will withhold 100 percent of the support recipient's forthcoming monthly support for that state and will commence a recovery action

for a percentage of support that is equal to the support recipient's compliance gap plus 10 percent of the support recipient's support in that state that has been disbursed to that date.

(5) If at any point prior to the Year Six Final Service Milestone the support recipient reports, and USAC verifies, that it is eligible for Tier 1 status or that it is no longer out of compliance with the 5G Fund performance requirements specified in § 54.1015(c), it will have its support fully restored and USAC will repay any funds that were recovered or withheld.

(c) *Year six final service milestone.* A 5G Fund support recipient must notify the Commission, USAC, and the relevant state, U.S. Territory, or Tribal government, if applicable, within 10 business days of its non-compliance with the final milestone. Upon notification that the support recipient has not met the 5G Fund performance requirements specified in § 54.1015(c) by the Year Six Final Service Milestone, the support recipient will have twelve months from the date of the Year Six Final Milestone deadline to come into full compliance with performance requirements for Year Six Final Milestone. If the support recipient does not report that it has come into full compliance with the performance requirements for the Year Six Final Milestone within twelve months, as verified by USAC, the Wireline Competition Bureau will issue a letter to this effect. Recipients of 5G Fund support shall be subject to the following non-compliance measures related to the recovery of support after this grace period:

(1) If a support recipient has deployed service that meets the 5G Fund performance requirements specified in § 54.1015(c) to at least 80 percent of the total eligible square kilometers in a state, but less than the required 85 percent of the total eligible square kilometers in that state, USAC will recover an amount of support that is equal to 1.25 times the average amount of support per square kilometer that the support recipient has received in the state times the number of square kilometers unserved up to the 85 percent requirement;

(2) If a support recipient has deployed service that meets the 5G Fund performance requirements specified in § 54.1015(c) to at least 75 percent, but less than 80 percent, of the total eligible square kilometers in that state, USAC will recover an amount of support that is equal to 1.5 times the average amount of support per square kilometer that the support recipient has received in the state times the number of square kilometers unserved up to the 85 percent requirement, plus 5 percent of the support recipient's total 5G Fund support for the 10 year support term for that state;

(3) If a support recipient has deployed service that meets the 5G Fund performance requirements specified in § 54.1015(c) to less than 75 percent of the total eligible square kilometers in a state, USAC will recover an amount of support that is equal to 1.75 times the average amount of support per square kilometer that the support recipient has received in the state times the number of square kilometers unserved up to the 85 percent requirement, plus 10 percent of the support recipient's total 5G Fund support for the 10 year support term for that state.

(d) Additional evidence required at year six final service milestone deadline. At the Year Six Final Service Milestone deadline, a 5G Fund support recipient is also required to provide evidence, which is subject to verification by USAC, that it has provided service that meets the 5G Fund performance requirements specified in § 54.1015(c) to at least 75 percent of the total square kilometers for each census tract or census tract group in which it was authorized to receive support. If after the grace period permitted in paragraph (c) of this section USAC has not verified based on the evidence provided that the support recipient has provided service that meets the 5G Fund performance requirements specified in § 54.1015(c) to at least 75 percent of the total square kilometers for each census tract or census tract group in which it was authorized to receive support, USAC will recover an amount of support that is equal to 1.5 times the average amount of support per square kilometer that the support recipient had received in the eligible area times the number of square kilometers unserved within that eligible area, up to the 75 percent requirement.

(e) *Compliance reviews.* If USAC determines subsequent to the Year Six Final Service Milestone that a support recipient does not have sufficient evidence to demonstrate that it continues to offer service that meets the 5G Fund performance requirements specified in § 54.1015(c) to all of the eligible square kilometers in the state as required by the Year Six Final Service Milestone, USAC shall immediately recover a percentage of support from the support recipient as specified in paragraphs (c)(1) through (3) and (d) of this section.

§ 54.1021 Record retention for the 5G Fund.

A recipient authorized to receive 5G Fund support and its agents are required to retain any documentation prepared for, or in connection with, the award of the 5G Fund support for a period of not less than ten (10) years after the date on which the recipient receives its final disbursement of 5G Fund support.

- 14. Amend § 54.1508 by revising paragraph (c)(4)(ii) to read as follows:

§ 54.1508 Letter of credit for stage 2 fixed support recipients.

* * * * *

(c) * * *

(4) * * *

(ii) Has a branch office:

(A) Located in the District of Columbia, or

(B) Located in New York City, New York, or such other branch office agreed to by the Commission, that will accept a letter of credit presentation from USAC via overnight courier, in addition to in-person presentations;

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